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Physical, Chemical, Milling, and Macaroni Characteristics

1971 CROP

UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE Plant Science Research Division

NORTH DAKOTA AGRICULTURAL EXPERIMENT STATION
DEPARTMENT OF CEREAL TECHNOLOGY



# UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE PLANT SCIENCE RESEARCH DIVISION in cooperation with STATE AGRICULTURAL EXPERIMENT STATIONS

# QUALITY EVALUATION OF DURUM WHEAT VARIETIES

# 1971 CROP\_\_\_\_\_/

by

W. C. Shuey, Research Technologist; J. W. Dick, Food Technologist; K. J. Sprick, Chemist; R. D. Crawford, R. D. Maneval, and N. B. Lofthus, Technicians; Plant Science Research Division, Agricultural Research Service; and L. D. Sibbitt, D. E. Walsh, M. H. Boeder, and S. Vasiljevic, Department of Cereal Chemistry and Technology, North Dakota Agricultural Experiment Station.

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This report was compiled in the Plant Science Research Division, Agricultural Research Service, U.S. Department of Agriculture. Special acknowledgment is made to the North Dakota State University for their facilities and services provided in support of these studies. The report is not intended for publication and should not be referred to in literature citations or quoted in publicity or advertising. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved.

This is a progress report of cooperative investigations containing some results that have not been sufficiently confirmed to justify general release; interpretations may be modified with additional experimentation. Confirmed results will be published through established channels. The report is primarily a tool for use of cooperators and their official staffs and to those persons having direct and special interest in the development of agricultural research programs.

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# COOPERATING AGENCIES, STATIONS, AND PERSONNEL

The cooperating agencies, stations, and personnel conducting the varietal plot and nursery experiments concerned with these durum tests in 1971 were as follows:

California Agricultural Experiment Station:

Davis, El Centro, Isleton, and Tulelake: Y. P. Puri and C. O. Qualset

Idaho Agricultural Experiment Station:

Aberdeen: D. W. Sunderman\*

Minnesota Agricultural Experiment Station:

Crookston, Morris, and St. Paul: R. E. Heiner\*, F. A. Elsayed, L. S. Smith, and D. D. Warnes

Montana Agricultural Experiment Station:

Bozeman, Creston, Havre, Moccasin and Sidney: F. H. McNeal\*, M. A. Berg\*, R. T. Harada, and G. P. Hartman

North Dakota Agricultural Experiment Station:

Carrington, Fargo, and Langdon: L. Joppa\*, H. Olson, and J. Quick

South Dakota Agricultural Experiment Station:

Eureka, and Watertown: D. G. Wells, Q. Kingsley, G. Bucheneau, J. J. Bonneman, and A. Dittman.

Washington State University:

Ellensberg, Pullman, and Royal Slope: C. F. Konzak, M. A. Davis, and E. Donaldson.

<sup>\*</sup> ARS Employees

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Mashington State University:

Ellennberg, Pullman, and Royal Slope: C. F. Monzak, M. A. Davis, and H. Donaldson,

#### INTRODUCTION

This, the tenth annual Durum Wheat Quality Report, is for the 1971 crop. Samples of standard varieties and new strains of durum wheat grown in cooperative experiments in the durum wheat region of the United States 2/ were milled and evaluated by the Hard Red Spring and Durum Wheat Quality Laboratory in cooperation with the Department of Cereal Chemistry and Technology on the campus of North Dakota State University at Fargo, North Dakota. The evaluation of the field plot and some advanced durum wheats is integrated with the work done by the Department of Cereal Chemistry and Technology of North Dakota State University. Methods and techniques are described in detail in the text of the report.

Where sufficient quantity of sample was available, the semolina was processed into spaghetti to determine the quality characteristics. When the quantity was insufficient or the dry slick color was sufficiently poor, only the dry slick test was employed. In previous years the mixogram or farinogram value was given for the samples tested. However, because the test was time consuming and of little consequence in the outcome of the general evaluation, it was abandoned.

The purpose of this report is to make available to cooperators the quality data on standard varieties and new strains of durum wheat from the 1971 crop.

The relatively new procedures adopted in this report are more fully described under the Milling, Color Score, Dry Slick Color Score, Spaghetti Processing, and Tenderness Score in the Methods Section. A statistical study of the results, comparing the dry slick method and other established evaluation methods was given in the section of Statistical Study of the Dry Slick Color Score in the 1963 Report (CR-59-64). A new method, using a Buhler3/ experimental mill and two Miag3/ laboratory purifiers, was employed to process the macro samples of durum wheat last year. The same procedure was used this year, however, the clothing on the break scalps was replaced.

<sup>2/</sup> Heiner, R.E. "Results on Spring Wheat Varieties Grown in Cooperative Plot and Nursery Experiments in the Spring Wheat Region in 1971." Plant Science Research Division, ARS, USDA, PSR-3-72.

<sup>3/</sup> Mention of a trademark name or proprietary product does not constitute a guarantee or warranty of the product by the U.S. Department of Agriculture, and does not imply its approval to the exclusion of other products that may also be suitable.

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<sup>2/</sup> Hainer, E.E. "Results on Spring Whest Varieties Grown in Cooperative Plot and Surnery Esperiments in the Spring Wheat Region in 1971." Flore Science Research Division, ARS, USMA, PSR-3-72.

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## SOURCE OF THE SAMPLES

Six hundred and seventy-six samples were received from twenty-one stations in seven states—California, Idaho, Minnesota, Montana, North Dakota, South Dakota, and Washington—for durum wheat quality tests. Approximately 10% of the samples tested were the named commercial varieties of Hercules, Lakota, Leeds, Rolette, Sentry, Wandell, Wascana, and Wells. The remaining samples were either new varieties or samples received from a special test for quality evaluation.

Thirty-nine Advanced Yield Nursery samples were received: fifteen from one station in Idaho (Aberdeen - irrigated plot); fourteen from five stations in Montana (Bozeman, Creston, Havre, Moccasin, and Sidney); and ten from one station in Washington (Royal Slope).

Forty-seven Field Plot samples were received: seventeen samples from two stations in California (Isleton and Tulelake); and thirty samples from one station in North Dakota (Carrington - dryland and irrigated plots).

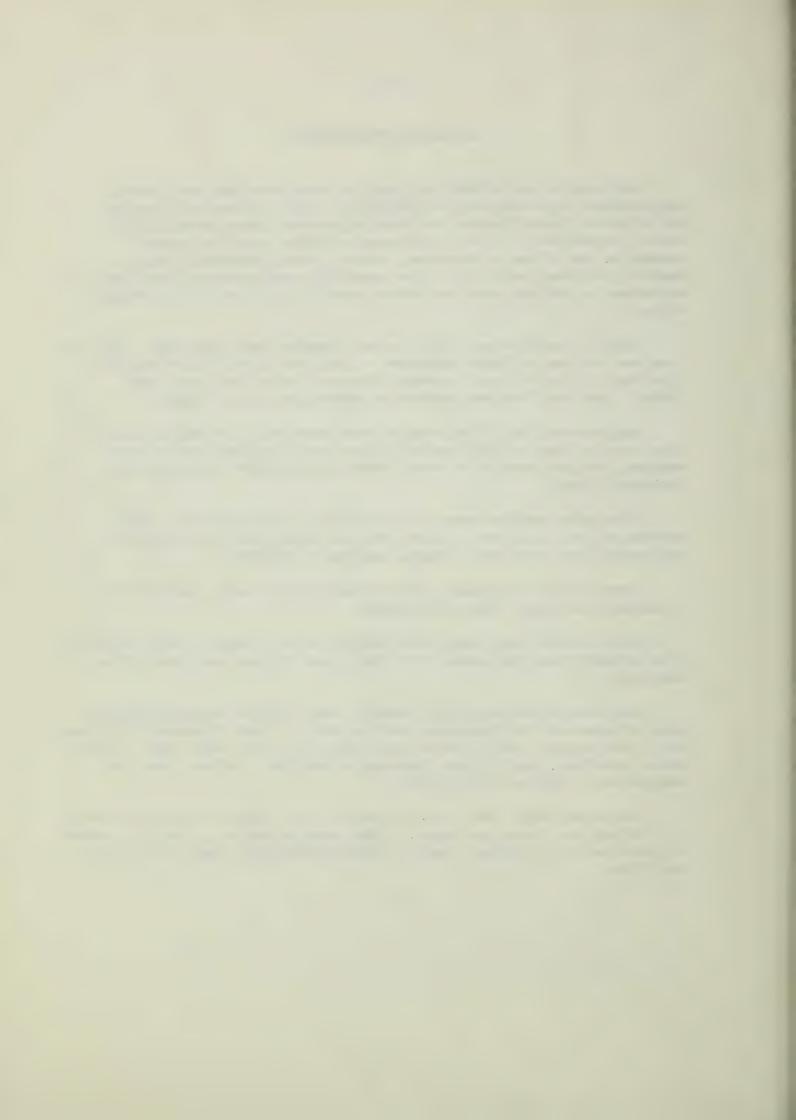
Thirty-two samples were received from the International Yield Nursery at two locations: eight from the Davis, California station, and twenty-four from the Pullman, Washington station.

Seventy-two Preliminary Yield Nursery Trials were received from Ellensburg and Royal Slope, Washington.

Three hundred and twenty-two Special Nursery samples were received from El Centro and Tulelake, California; and Pullman and Royal Slope, Washington.

One hundred and sixty-four samples were Uniform Regional Nursery samples grown at the Crookston, Morris, and St. Paul, Minnesota stations; Fargo and Langdon, North Dakota stations; Eureka and Watertown, South Dakota stations; and Pullman, Washington station. As last year, no samples were received from Montana.

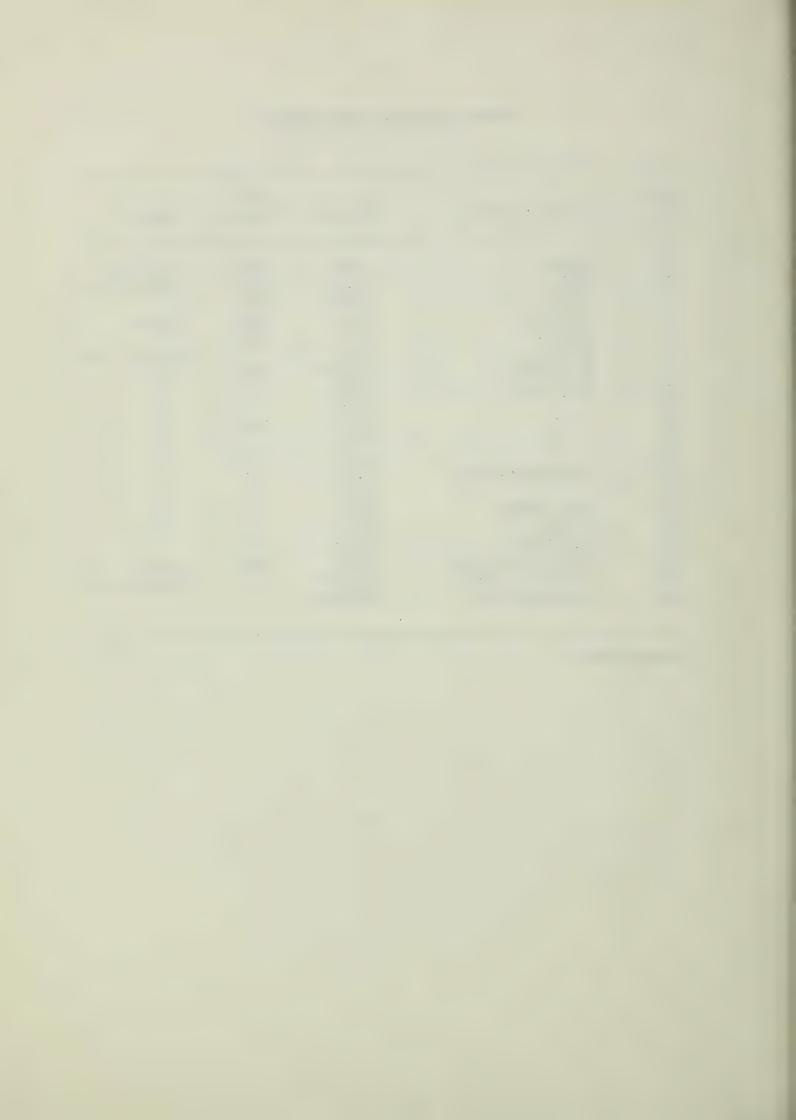
The durum wheats which are included in the Uniform Regional Nursery 1971 Trials are listed on Page 5. The cross or variety, the C.I. number or state selection number, and the station which developed the variety are given.



# UNIFORM REGIONAL DURUM NURSERY

Entry		C.I. or	Year	
No.	Cross or Variety	Sel. No.	Entered	Source
1	MINDUM	5296	1929	Minnesota
2	WELLS	13333	1957	USDA-N.Dak.
3	LEEDS	13768	1963	11
4	HERCULES	DT191	1966	Canada
4 5	WASCANA	DT317	1968	11
	ROLETTE	D6517	ff	USDA-N. Dak
6 7 8 9	61130/LDS	D6647**	1969	n
8	6062/6142	D6674	11	11
9	11	D6676	11	tt.
10	H .	D6721	1970	Ħ
11	m · · · ·	D6722	п	tt
12	11	D6723	TT .	11
13	Ldn*2/St464//Lds	D6714	11	11
14	e de la companya del companya de la companya del companya de la co	D6715	11	11
15	Lds//Lk*Ldn	D6718	11	11
16	561/Lds	D6733	11	11
17	Lds/RL3601	D6761	11	11
18	RL3601//RL3442/Lk	DT327	1971	Canada
19	61130/Lds//6468	D6838**	II	USDA-N. Dak
20	61130/Lds//Lds	D6876**	11	п

<sup>\*\*</sup> Semidwarfs



#### METHODS

The methods used in the testing of the samples were essentially the same as given in last year's report, with the addition of some new tests and interpretations of the tests, as well as deletions.

Briefly, the following methods and terminologies were applied:

Test Weight Per Bushel - The weight per Winchester bushel of dockage-free wheat.

Thousand Kernel Weight - The 1000 kernel weight was determined by counting the number kernels in a 10 g. sample of cleaned, picked wheat on an Asco Seed Counter 3/.

<u>Kernel Size</u> - The percentage of the size of the kernels (large, medium, and small) was determined on a wheat sizer as described by Shuey4/.

The sieves of the sizer were clothed as follows:

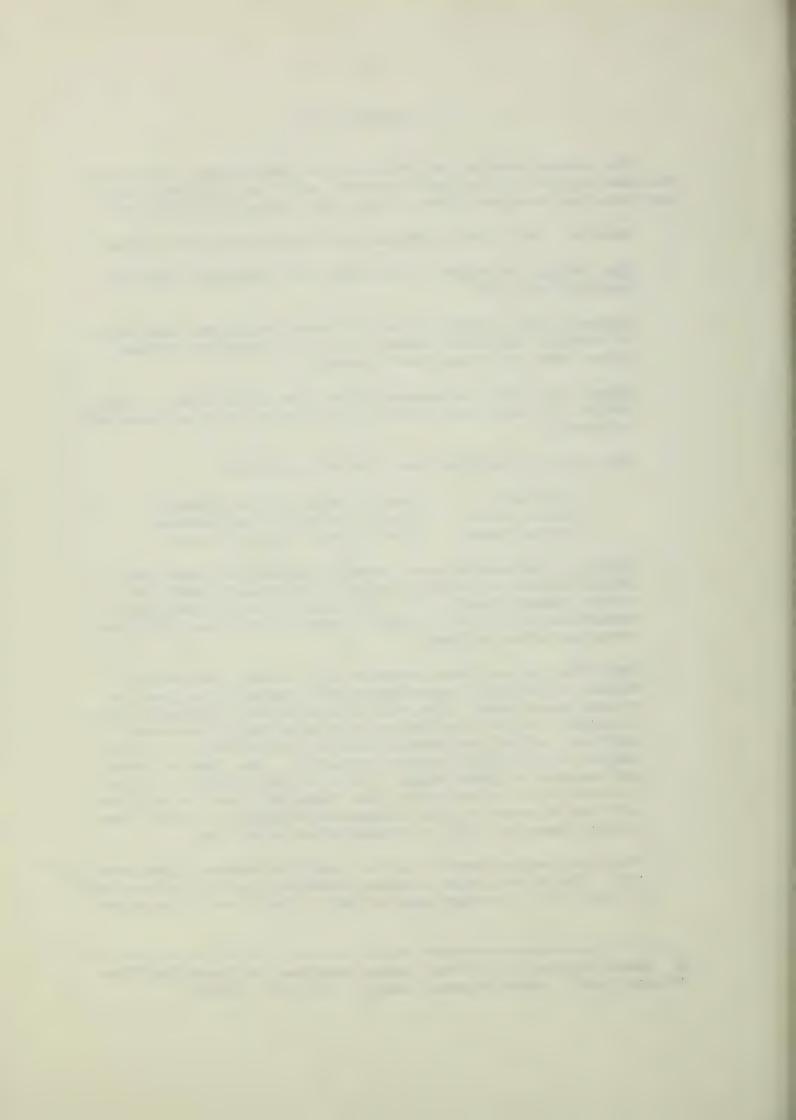
Top Sieve - Tyler # 7 with 2.92 mm. opening Middle Sieve - Tyler # 9 with 2.24 mm. opening Bottom Sieve - Tyler #12 with 1.65 mm. opening

<u>Milling</u> - The samples were cleaned by passing the wheat over an Emerson Kicker and Dockage Tester 3/ and through a modified Forster Scourer Model 6 3/. The clean dry samples were pretempered to 12.5% for at least 72 hours prior to any additional tempering before milling.

The field plot and large advanced yield nursery samples were milled on a Buhler 3/ experimental mill specially designed for milling durum wheat. The mill is equipped with corrugated rolls throughout and the semolina purified on a Miag 3/ laboratory purifier. All of the stock is handled pneumatically. A flow diagram for the mill is shown on Page 11. The clean dry wheat was tempered in three stages: first to 12.5% moisture at least 72 hours prior to the second stage which is to add an additional 2.0% for 18 hours to give a cumulative moisture of 14.5%, then a final temper of 3.0%, 45 minutes prior to milling.

The other samples were milled on a modified Brabender Quadrumat  $Jr.\frac{3}{}$  Mill. The #2 roll with 13 corrugations per inch is replaced with #1 roll with 26 corrugations per inch. The #3 and #4 rolls are

<sup>4/</sup> Shuey, William C. A Wheat Sizing Technique for Predicting Flour Milling Yield. Cereal Science Today 5: 71-72,75 (1960).



replaced with #2 rolls. The pre-tempered wheat is tempered overnight to 15.5% moisture content before milling. The ground meal is sifted for seven seconds on a Roto-matic $\frac{3}{2}$ sifter equipped with 30 W and 100 W sieves. The overs of the 30 W is bran, the thrus of the 100 W is flour, and the middle cut-over 100 W and thru 30 W is the unpurified semolina. The purified semolina is obtained by introducing unpurified semolina into Purifier #1 of the Buhler3/ Mill flow (Page 12), but the tailings for Purifier #1 are not recycled. This material is used in testing the quality of semolina.

Protein Content - The protein was calculated by multiplying by the factor of 5.7, the percent nitrogen, as determined by the standard Kjeldahl procedure.

Mineral Content or Ash Content - This was determined by measuring the residue of the minerals left after incinerating the sample for approximately 16 hours at 600°C. The results were reported as percentage of the sample which was incinerated.

Absorption - This was the water, expressed as percent of the semolina, required to bring the dough to the proper consistency.

All values (protein, ash, absorption) are reported on a 14% moisture basis.

MACRO Spaghetti Processing - Spaghetti was processed on a semi-commercial scale pasta extruder (DEMACO) $\frac{3}{}$ . The control as well as sprouted durum was processed with the following extruding conditions:

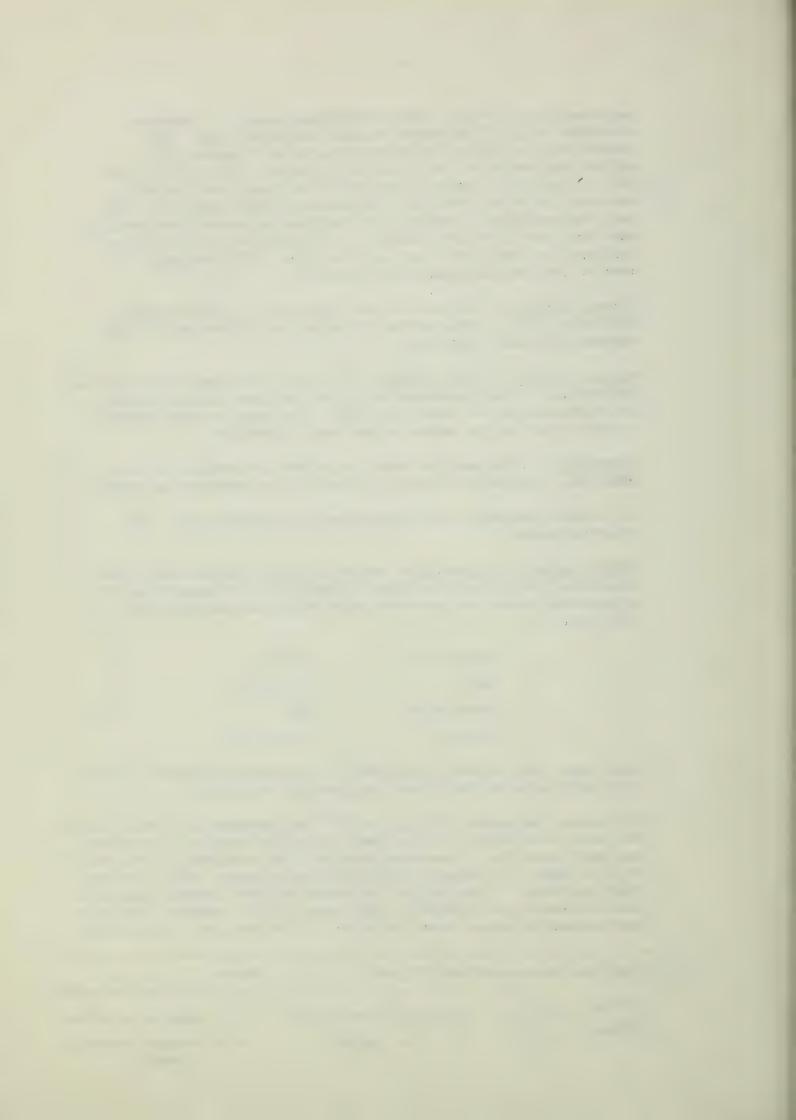
> Temperature  $...49.5^{\circ}C.$ Rate . . . . . . . . 12 r.p.m. Absorption . . . . 30% Vacuum . . . . . . 18 in. Hg

These were the optimum conditions for processing spaghetti, which were calculated by the linear programming technique.

To process the pasta, 1000 g. batch was premixed by slowly adding the water and mixing at slow speed for approximately 30 seconds, and high speed for 10 seconds, then add the remainder of the water at slow speed in a Hobart C-100-T3/ mixer equipped with a Pastry Knife Agitator. After all of the water has been added, the semolina and water are blended at high speed for 30 seconds; the mixer was stopped to scrape down the sides of the bowl and the blending

# 5/ Weight was determined as follows:

m<sub>1</sub> = original moisture W = desired amount of sample



continued for 90 seconds more to complete the premix stage. The premixed pasta was then transferred to the vacuum mixer of the press and extruded through an 84-strand 0.043 inch teflon spaghetti die. A jacketed extension tube ( $9\frac{1}{4}$ " long x 1-3/4" inside diameter) was attached to the semi-commercial pasta extruder to allow more time for hydration of the semolina and minimize the number of white specks (unhydrated semolina) in the spaghetti. Extrusion temperature was controlled by a circulating water bath.

MICRO Spaghetti Processing - Thirty grams of semolina were mixed with water to form a stiff dough, pressed into spaghetti and dried. The equipment and procedure have been described by Harris and Sibbitt<sup>6</sup>/ and Fifield<sup>7</sup>/.

<u>Spaghetti</u> <u>Drying</u> - Spaghetti was dried in an experimental pasta dryer for an 18 hour cycle as described by Gilles, Sibbitt, and Shuey8/. During the drying period, the humidity of the dryer was decreased linearly from 95% to 60% R.H. and the temperature was held constant at 100°F.

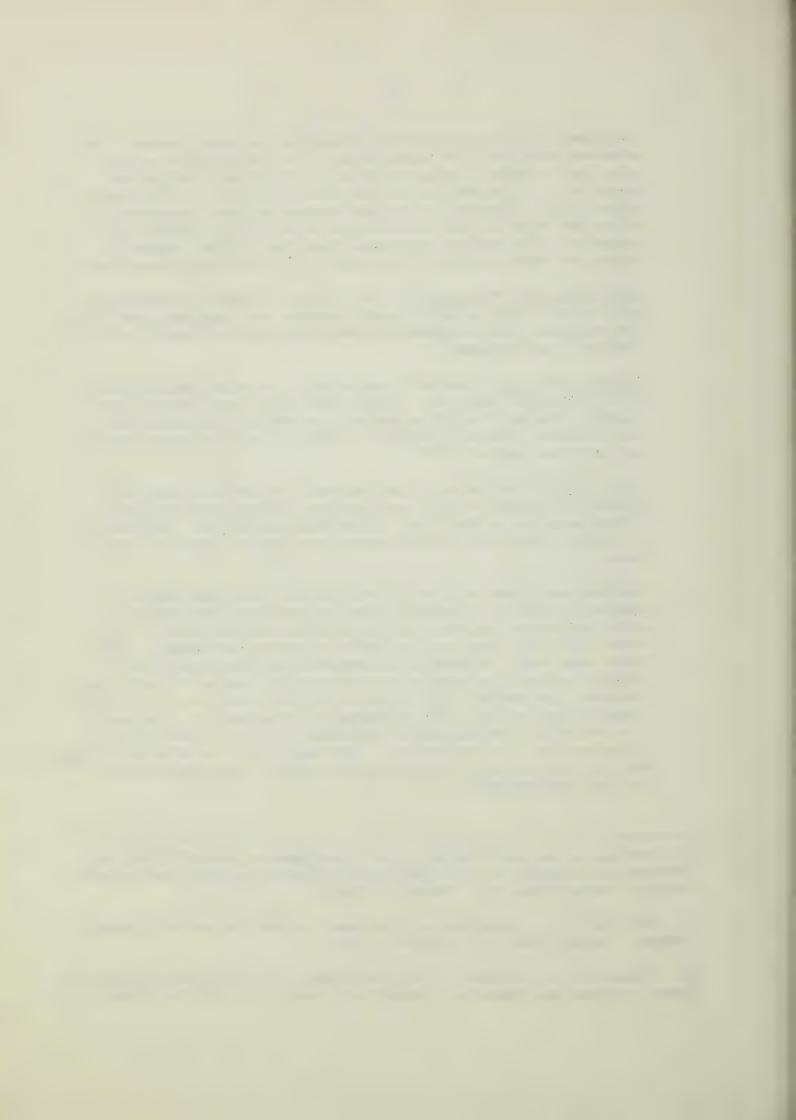
<u>Color Score</u> - The color of the spaghetti or semolina has been generally accepted as the most important single grading factor. A deep amber or golden color is the most preferable. The amount of yellow pigmentation determines the extent or degree of amberness.

Samples which have a color rating 2 points below the standard spaghetti score or 10 points below the standard slick color score are unsatisfactory. It is possible that the average color score for a crop year may be higher or lower than average, therefore, this would be taken into consideration when giving the overall rating of a variety over a number of years. A sample may receive a low rating for reasons other than a deficiency of yellow pigmentation such as: D - Dullness; G - Grayness; R - Redness; B - Branny; W - White Cast or Chalkiness; and S - Speckiness, or a combination of these factors. The sample will be rated accordingly with the exception of the intensity, quantity, and depth of the yellow pigmentation.

<sup>6/</sup> Harris, R. H., and Sibbitt, L. D. Experimental Durum Milling and Processing Equipment with Further Quality Studies on North Dakota Durum Wheats. Cereal Chem. 19: 388-402 (1942).

<sup>7/</sup> Fifield, C. C. Experimental Equipment for Manufacture of Alimentary Pastes. Cereal Chem. 11: 330-334 (1934).

<sup>8/</sup> Gilles, K. A., Sibbitt, L. D., and Shuey, W. C. Automatic Laboratory Dryer for Macaroni Products. Cereal Sci. Today 11: 322-324 (1966).



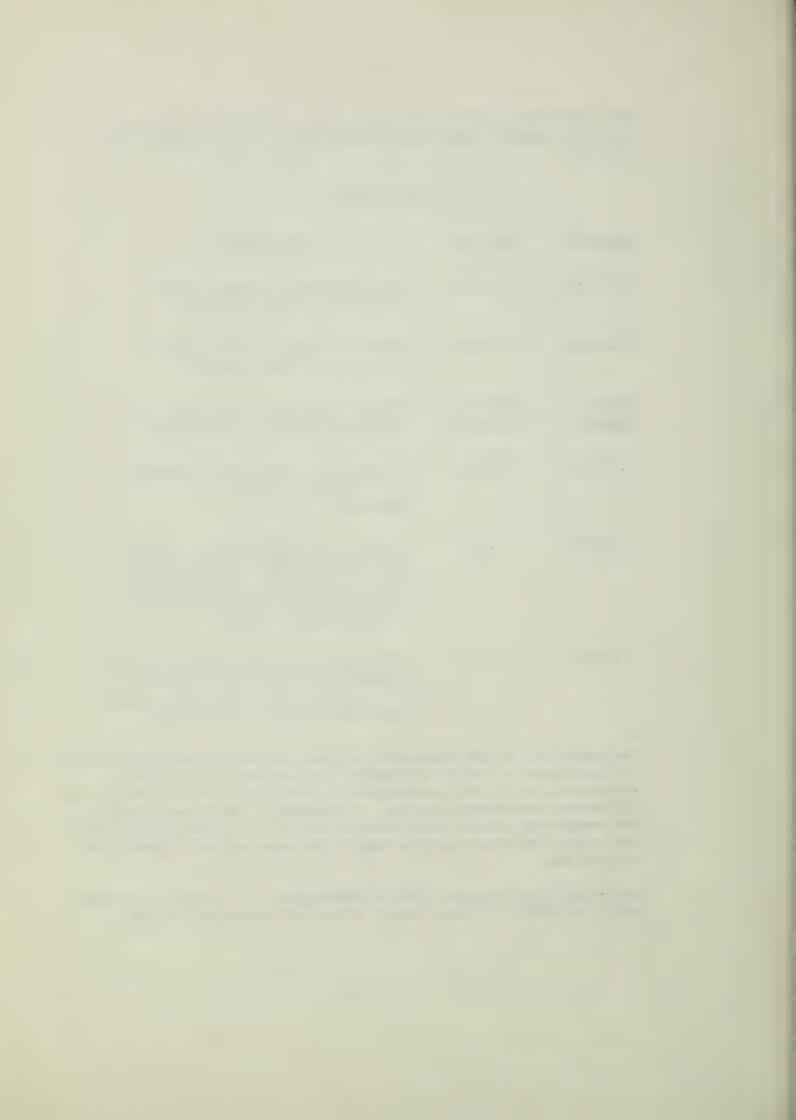
The following grading system has been adopted for scoring the color of spaghetti and semolina relative to the standard color score:

# COLOR SCORE

Spaghetti	Dry Slick	Description
2.0 above	10 above	Much deeper and intense yellow pigmentation than standard.
1.0 above	5 above	Deeper and more intense yellow pigmentation than standard.
Equal to Standard	Equal to Standard	Standard quality, depth, and intensity of yellow pigmentation.
0.5 below	2 below	Slightly less depth and intensity, but sufficient quantity of pigmentation.
1.0 below	5 below	Slightly less quantity as well as depth and intensity of pigmentation than the standard, but still sufficient to be rated satisfactory on the basis of color.
2.0 below	10 below	Sufficiently less quantity of yellow pigmentation than the standard to give a pale yellow color and graded unsatisfactory for color score.

The numerical rating describes the depth or amount of pigmentation. In cases where a sample is graded down because of off-color, speckiness, etc., the designation is shown by a letter abbreviation following the numerical score. For example: 60-W would indicate the sample was chalky white with little or no yellow pigmentation; 80-D would indicate that the sample had some yellow pigmentation, but was dull.

<u>Dry Slick Color Score</u> - This is determined by slicking the sample with a standard of known color rating and comparing the two.



Spaghetti Color - The spaghetti color scores were determined on a Model D 25 Hunter Color Difference Meter 3/ equipped with a D 25 A optical unit. The specimen area (2 in. diameter) was covered with straight spaghetti strands and readings were taken against a black background with 0% reflectance. Color difference values (L%, a%, and b%) were measured for all the spaghetti samples by the method of Walsh, Gilles and Shuey 9/. A uniform chromaticity chart was used for determining spaghetti color scores.

# Cooking Characteristics of Spaghetti-

# a. Cooking Procedure

A modification of the method of Sheu et al. 10/ was adapted to determine cooking quality of spaghetti used in this study. Spaghetti (10 g.) which had been broken into lengths of approximately 5 cm., was placed into 300 ml. of boiling distilled water in a 500 ml. beaker. After 20 min. cooking, the samples were washed thoroughly with distilled water in a Buchner funnel and allowed to drain for 2 minutes. The cooking water as well as the washing solution was collected in pre-weighed 250 ml. beakers.

### b. Tenderness Score

Two strands of cooked spaghetti were placed on a plexiglass plate and sheared at a 90° angle with a special plexiglass tooth. A continuous recording of distance versus force was made by the instrument during the operation. An automatic integrator was used to calculate the area under the curve (g. cm.) which was the amount of work required to shear the cooked spaghetti. To measure firmness, the average of four integrator scores was used, and the average work to shear was used as a measure of spaghetti firmness. The higher the value, the firmer the spaghetti. A value of approximately 5 appears to be preferential.

Calculations were as follows:

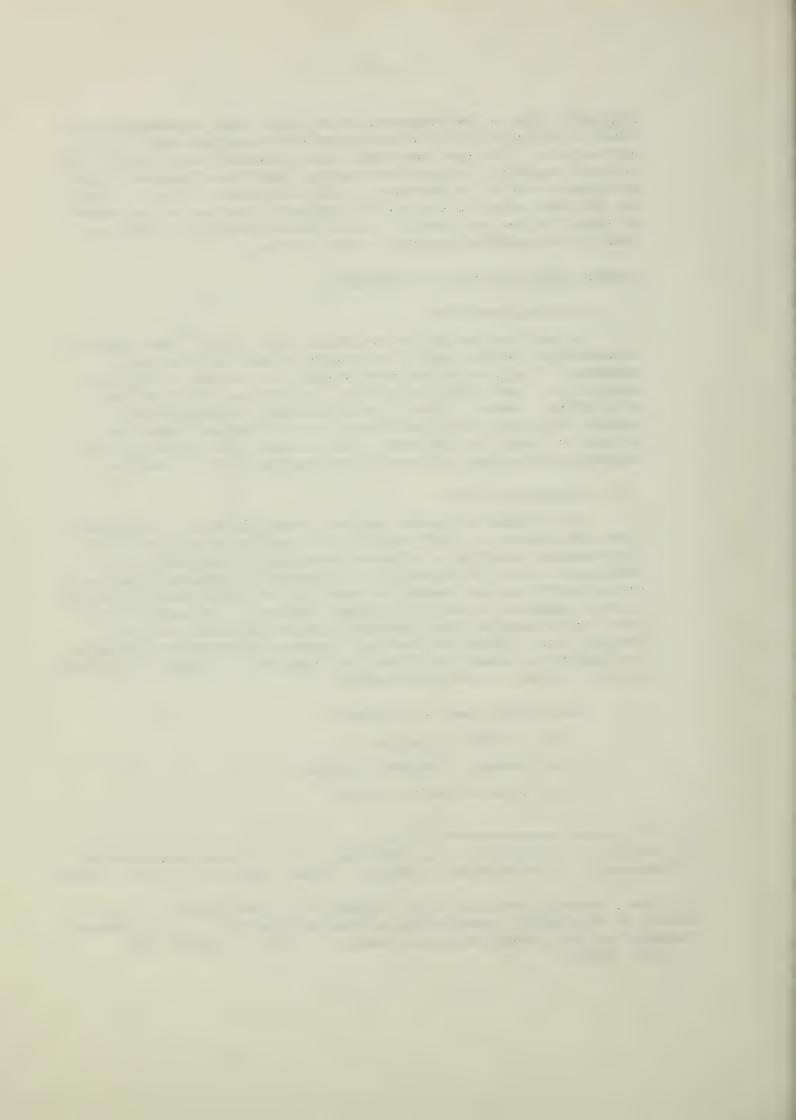
E = 0.0199 X A (g. cm.)

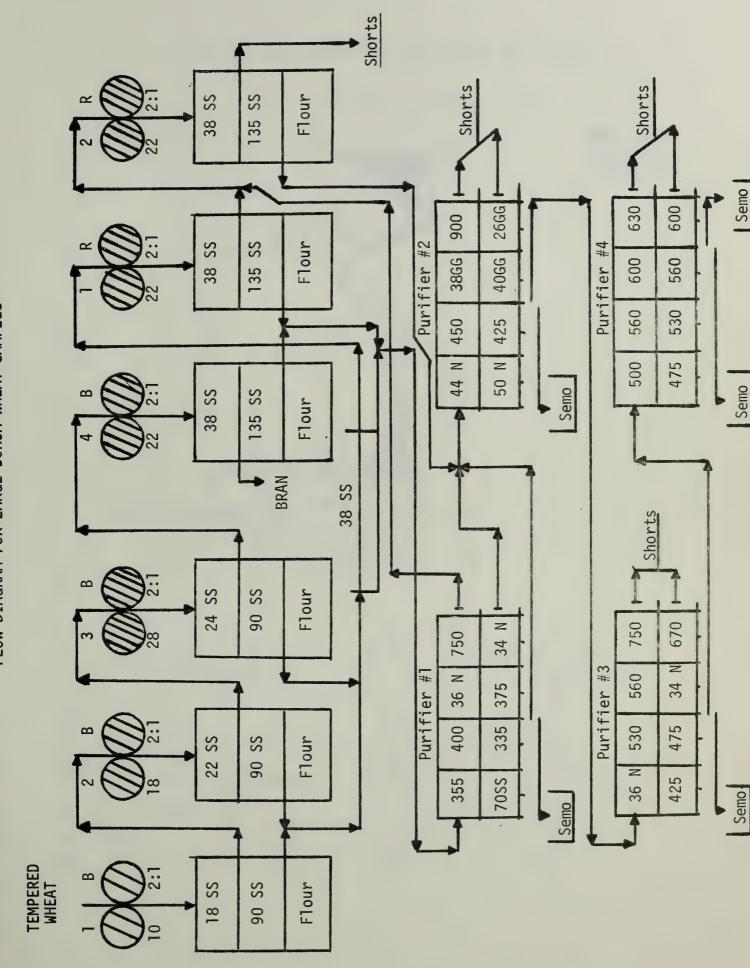
A = Average integrator reading

E = Area of curve in g. cm.

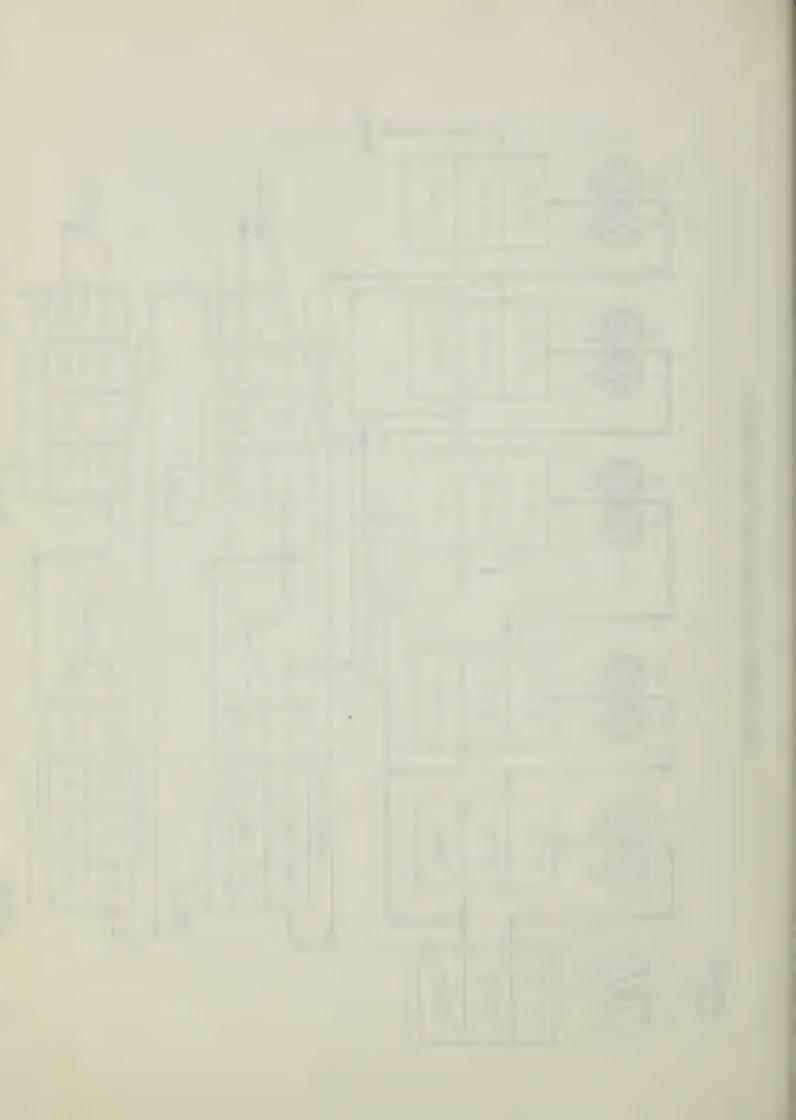
<sup>9/</sup> Walsh, D. E., Gilles, K. A., and Shuey, W. C. Color Determination of Spaghetti by the Tristimulus Method. Cereal Chemistry 46: 7-14 (1969).

<sup>10/</sup> Sheu, Ruey-Yi, Medcalf, D. G., Gilles, K. A., and Sibbitt, L. D. Effect of Biochemical Constituents on Macaroni Quality. I. Differences between Hard Red Spring and Durum Wheats. J. Sci. Fd. Agric. 18: 237-239 (1967).

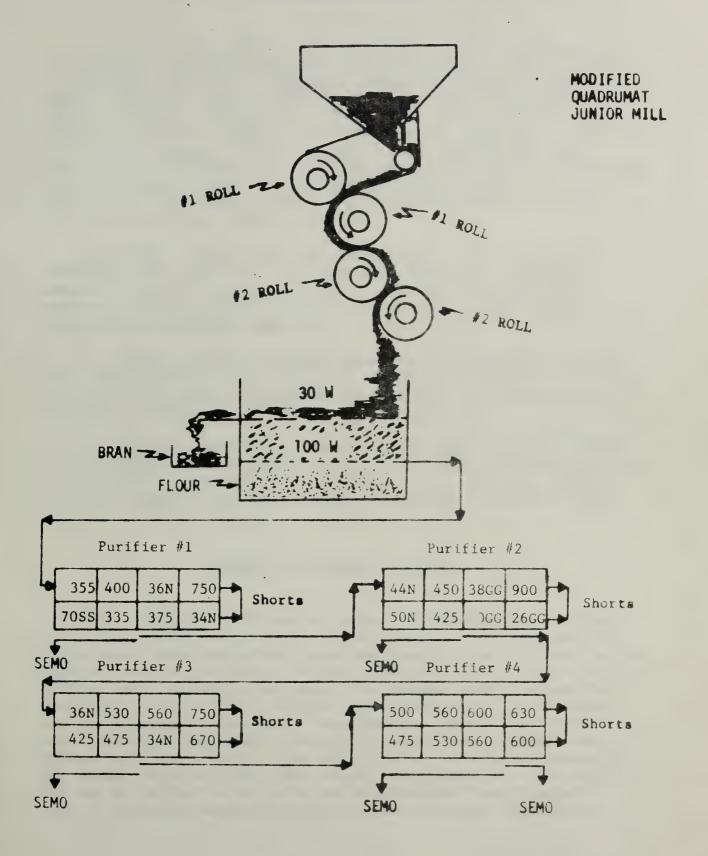


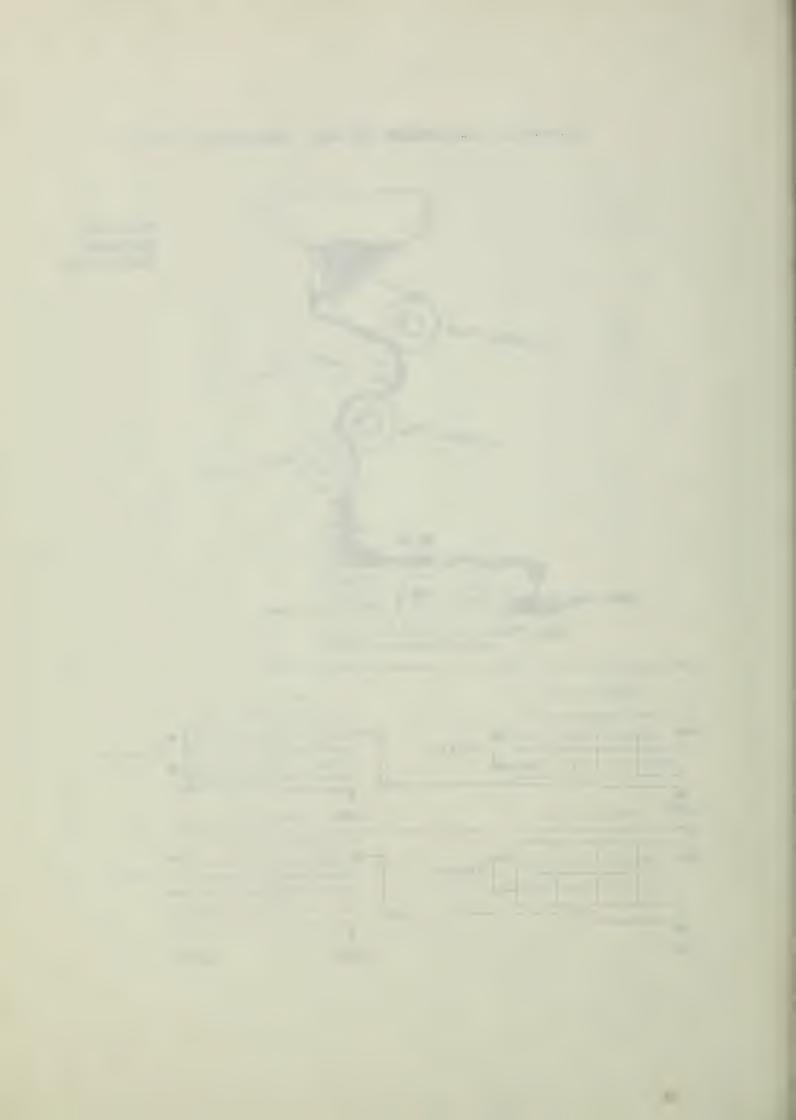


FLOW DIAGRAM FOR LARGE DURUM WHEAT SAMPLES



# SCHEMATIC FLOW DIAGRAM FOR SMALL DURUM WHEAT SAMPLES





#### EXPERIMENTAL RESULTS

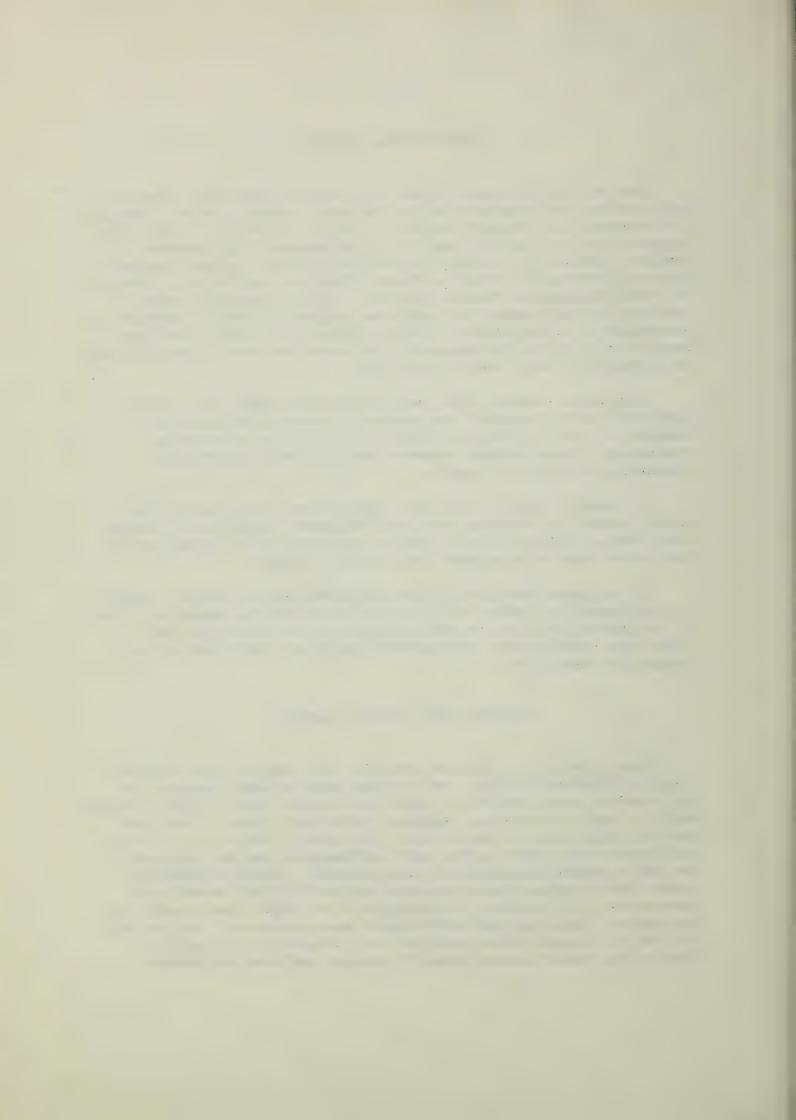
The results obtained for the 1971 crop of durum wheat samples are tabulated and presented in the following order: Tables 2 through 4 - Advanced Yield Nursery Samples; Tables 5 through 8 - Field Plot Nursery Samples; Tables 9 and 10 - International Yield Nursery Samples; Tables 11 through 13 - Preliminary Yield Nursery Samples; Tables 14 through 22 - Special Nursery Samples; and Tables 23 through 30 - Uniform Regional Nursery Samples. Very few samples tested exhibited sprout damage, although some samples did exhibit weathering, blackpoint or green kernels. Table 1 includes the Macro and Micro data for the 1971 durum standard. For nurseries where a standard was not furnished, these results were used.

Only those samples which had an acceptable dust color score (above 87) were processed into spaghetti, except the large macro samples or those in which the plant breeder had an interest in evaluating. These general comments could be made regarding the processing of the micro samples.

- 1. Leeds, from all stations, appeared wet during mixing and sticky during the kneading even with the proper absorption. However, there was no problem in extruding the spaghetti or in adjusting for the proper absorption using 0.1 ml./25 lb. pressure.
- 2. At least one-third of the semidwarf samples did not respond to the absorption correction factor of 0.1 ml./25 lb. pressure. Also, it was unpredictable as to the direction of the correction factor, since some samples would over-correct and others under-correct with changes in absorption.

#### ADVANCED YIELD NURSERY SAMPLES

Idaho (Table 2). Fifteen advanced yield samples were received from the Aberdeen station. Two of these samples were comprised of the standard named varieties, Leeds and Wandell; four of these samples were the Mexican varieties, Anhinga, Caste Lde L Monte, Crane, and Gerondo, and nine were selections. The Wandell sample did not have a sufficient color score in the dust and therefore was not processed, but had a general evaluation of some promise. Selection M6800127 showed good promise, while Selection D-18162-2R-3M-2Y showed some promise as a new variety. This selection has shown some promise for two years. Selection NDD 66102 showed some promise as a new variety but due to low dust color score was not processed into spaghetti. Some of the Idaho samples showed blackpoint and some yellowberry.



Montana (Table 3). Fourteen advanced yield nursery samples were received from the five Montana stations -- Bozeman, Creston, Havre, Moccasin, and Sidney. These samples were comprised of the two named varieties, Leeds and Wells, for all stations; while the samples from Sidney, both dryland and irrigated, also included the Hercules variety. The dryland samples had lower test weight, lower 1000 kernel weight, smaller kernel size distribution, higher protein, less purified semolina yield, higher semolina ash, less specks, higher color score, and tenderness score than the irrigated samples.

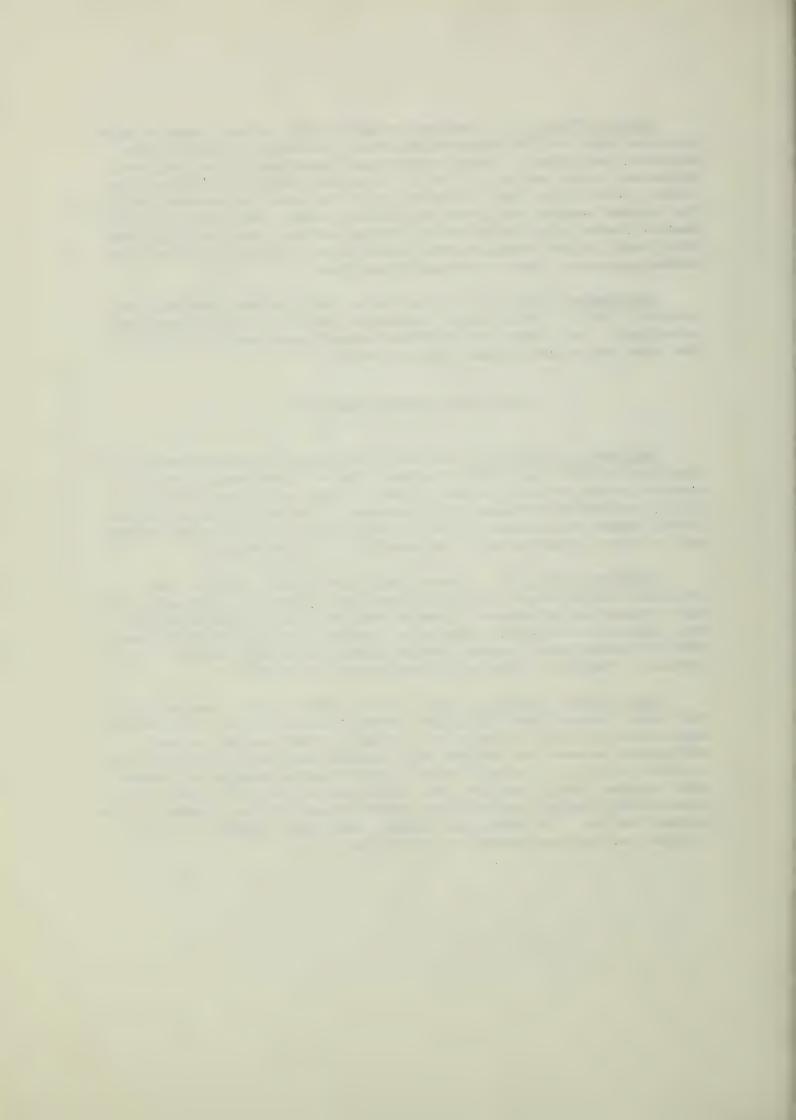
<u>Washington</u> (Table 4). Ten advanced yield nursery samples were received from the Royal Slope, Washington station. All of these were selections. Only Selection D620786-1 showed good promise. All of the other selections showed little promise.

### FIELD PLOT NURSERY SAMPLES

California (Table 5). Six field plot nursery samples were received from the Isleton, California station. One of these samples was the standard named variety, Leeds. Three of these selections, ND 6655, D7010, and K6800718 showed little promise. The other two, D7015 and D7081, showed no promise. Some of these selections definitely showed soft milling characteristics undesirable for durum wheats.

California (Table 6). Eleven field plot nursery samples were received from Tulelake, California station. Three of these were the named varieties, Albatross, Crane A, and the standard Leeds variety. Only Selection Acc 63038 showed good promise. Selections D7064, and K6800719 showed some promise, while Selection NDD 6644 showed little promise. The rest of the selections showed no promise.

North Dakota (Tables 7 & 8). Thirty samples were received from the field plots at the Carrington, North Dakota station. The samples were raised on both irrigated and dryland. There was not as much difference between the dryland and irrigated samples as has been noted in other years or in other places. The irrigated samples all showed good promise, while Hercules, and Selections D6718, D6721 and D6761 showed some promise, and Selection D6647 showed little promise for the dryland series. The selections which showed good promise on both dryland and irrigated would be preferable.



## INTERNATIONAL YIELD NURSERY SAMPLES

California (Table 9). Eight International Yield Nursery Samples were received from the Davis, California station. The named variety, Leeds, was the regular American variety, while there were three Mexican source varieties, Crane 'S' A, Crane 'S' B, and Jori C-69. The selection S-9 showed good promise. The rest of the samples showed no promise.

Washington (Table 10). Twenty-four International Yield Nursery Samples were received from the Pullman, Washington station. Leeds and Wandell showed good promise, and Capeiti and Selection S-9 showed some promise. The rest of the samples in the nursery, including Wells, showed little or no promise.

# PRELIMINARY YIELD NURSERY SAMPLES

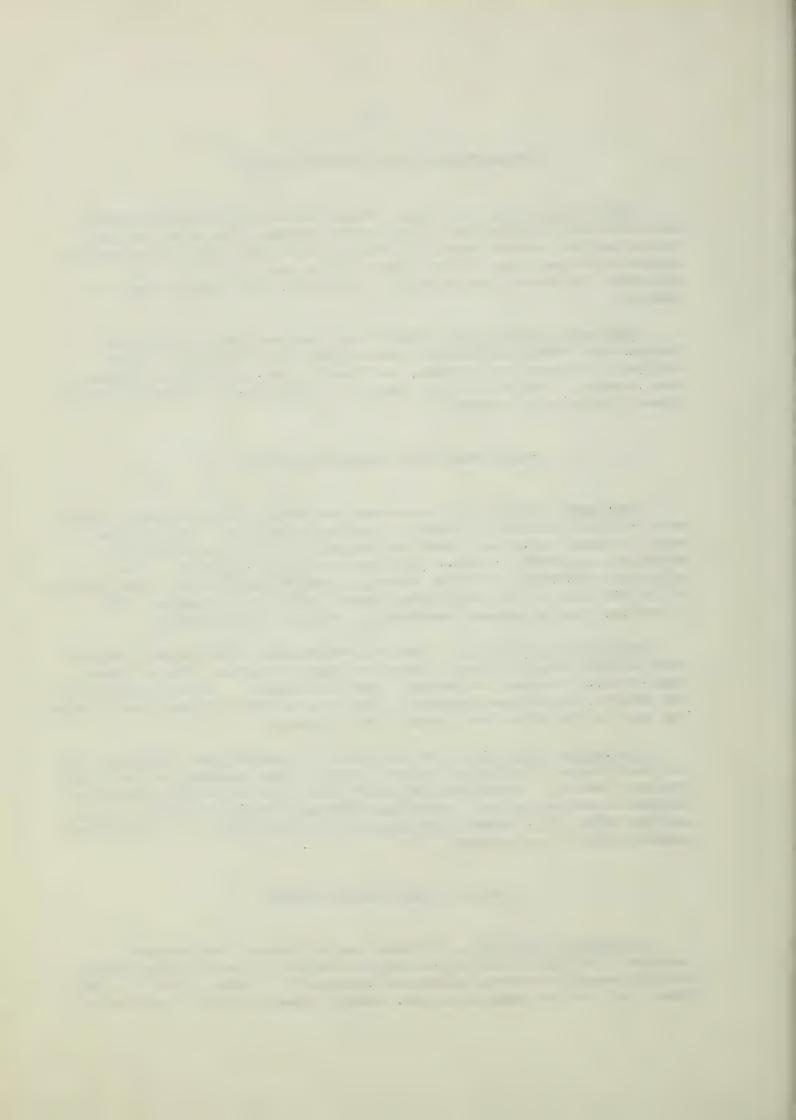
Washington (Table 11). Seventeen Preliminary Yield Nursery Samples were received from the Ellensburg, Washington station. Two of these were the named varieties, Leeds and Wandell. Selections K6800707, M6800127, and M6800139 showed good promise as new varieties. The selections K6800719, M6800116, M6800143, and M6800198 showed some promise. All of the rest of the selections showed little or no promise. The Ellensburg samples showed considerable content of yellowberry.

Washington (Table 12). Nineteen Preliminary Yield Nursery Samples were received from the Royal Slope, Washington station. Two of these samples were the named varieties, Leeds and Wandell. Selections K6800127, and M6800127 showed good promise. Selection WA 005867 showed some promise. The rest of the selections showed little promise.

Washington (Table 13). An additional 13 samples were received from the Royal Slope, Washington station. One of these samples was the named variety, Wandell. Selections NDD 64107 (#26), and NDD 66235 showed good promise as new varieties. Selections NDD 64127 (#20), ND 655015 (#21), and NDD 67201 (#53) showed some promise. All the rest of the selections showed little or no promise.

# SPECIAL YIELD NURSERY SAMPLES

California (Table 14). Fifteen Special Nursery Samples were received from the El Centro, California station. Five of these samples were the named varieties, Albatross, Anhinga "S", Brant, Brant "S", and Crane. All of the samples in this nursery showed little or no promise.



California (Table 15). Twenty-two samples were received from the Genotype Environmental Durum Wheat Nursery at Tulelake, California. Two of these samples were the named variety, Sentry. Entry Nos. 15, 16, 24, 26, 31, 148, 149, and 70-168 showed good promise. Sentry-1 and Entry Nos. 2, 34, 42, 44, 100, 124, 133, 137, 156, 158, and 70-85 showed some promise. Entry No. 83 and the Sentry-80 showed little promise. The series of samples from this nursery showed some blackpoint and yellowberry.

California (Table 16). Fifty-nine Special Tulelake Field Station Nursery Samples were received from Tulelake, California. Entry Nos. 108, 587, 598, and 262 showed good promise as new varieties. Entry Nos. 557, and 542 showed some prmise as new varieties, while the rest of the entries showed little or no promise as new varieties.

Washington (Table 17). Fifty-six samples were received from the Pullman, Washington station PI Line Series. This series contained only one named variety, Arnaud De Studina. The samples which were not processed into spaghetti did not have satisfactory dust color score. Only Selections PI 165202-1 and PI 165206-2 showed some promise as new varieties. All the rest of the selections showed little or no promise.

Washington (Table 18). Seventy-seven Special Mutant Series samples were received from the Pullman, Washington station.

Mut. 1296 #2, Mut. 1324 #1, Mut. 1372 #1, Mut. 1372 #2, Mut. 1381 #1,

Mut. 1381 #2, Mut. 1381 #4, Mut. 1383 #2, and Mut. 1386 #5 showed good promise as new varieties. Mut. 1247 #2, Mut. 1292 #1, Mut. 1296 #1,

Mut. 1299 #1, Mut. 1316 #1, Mut. 1369 #1, Mut. 1376 #1, Mut. 1376 #2,

Mut. 1376 #3, Mut. 1376 #4, Mut. 1378 #5, Mut. 1381 #6, Mut. 1381 #7,

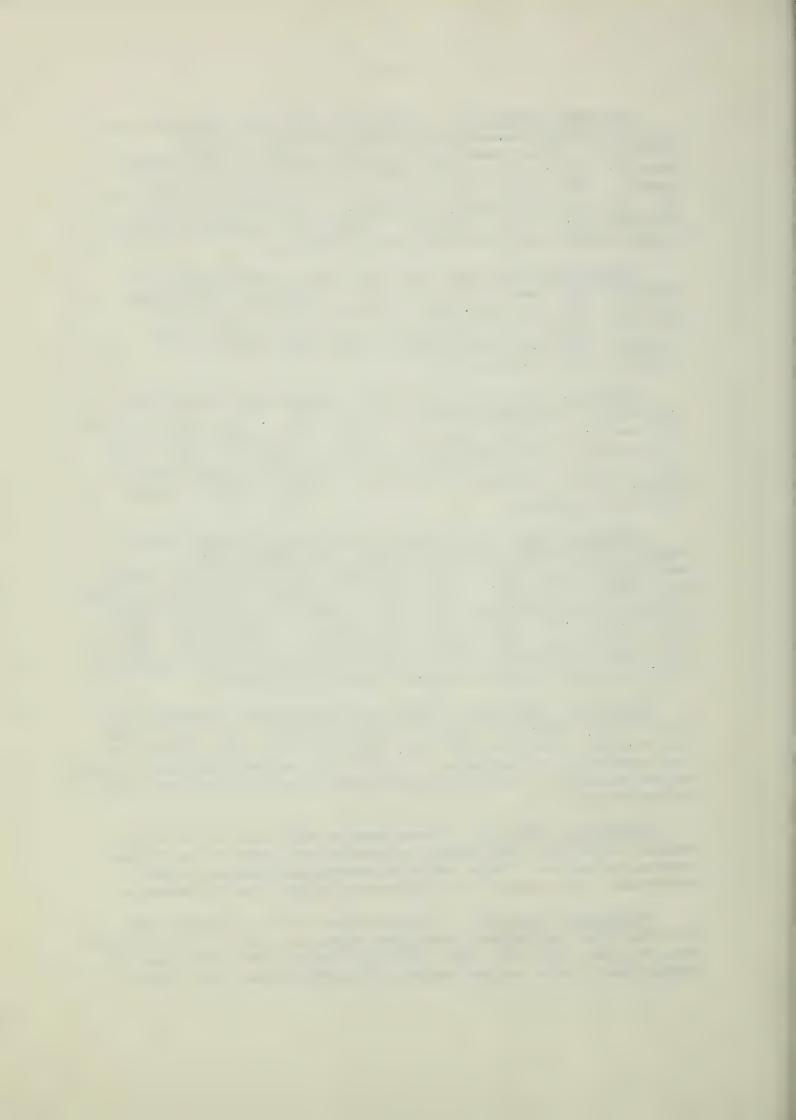
Mut. 1385 #12, and Mut. 1386 #6 showed some promise as new varieties.

All of the other selections showed little or no promise.

Washington (Table 19). Thirty-four samples were received from the Pullman, Washington Special 707 Mutant Series. Mut. #4, #7, #8, #13, #14, #15, #16, #18, #21, #25, #27, #31, #32, #33, and #34 showed good promise as new varieties. Mut. #1, #5, and #6 showed some promise as new varieties. The other mutants showed little or no promise as new varieties.

Washington (Table 20). Three samples were received from the Regular Durum 1970 North Dakota Nursery Series grown at the Pullman, Washington station. D6674 and D6761 showed good promise as new varieties. The samples from this nursery showed some yellowberry.

Washington (Table 21). Fifty-one Special 50 g. Samples were received from the Pullman, Washington station. Mut. #35, #39, #42, #44, #45, #47, #48, #50, #51, #52, #53, #55, #56, #57, #58, #59, and #62 showed good promise as new varieties from their dust color score.



Washington (Table 21 Cont'd.). Mut. #37, Mut. 1296-4, Mut. 1306-3, Mut. 1324-2, NDD 63152-24-1, NDD 64115-52-1, NDD 64127-99-2, NDD 64150-59-1, and NDD 64150-59-3 showed some promise as new varieties. All of the other samples showed little or no promise as new varieties.

Washington (Table 22). Five samples were received from the Special Durum Wheat Nursery at Royal Slope, Washington. These samples were originally from a Chilean Durum Nursery. Four of these selections showed no promise. One selection showed little promise.

#### UNIFORM REGIONAL NURSERY SAMPLES

Minnesota (Tables 23, 24, & 25). Sixty-three samples were received from three stations in Minnesota -- Crookston, Morris, and St. Paul. Seven of these samples were the named varieties, Hercules, Lakota, Leeds, Mindum, Rolette, Wascana, and Wells. The St. Paul samples showed some blackpoint.

North Dakota (Tables 26 & 27). Forty-four samples were received from two stations in North Dakota -- Fargo and Langdon. These samples were processed in cooperation with the State and the data contained in the tables are the averages of the four replicates of the individual tests. Six of these samples were the named varieties, Hercules, Leeds, Mindum, Rolette, Wascana, and Wells.

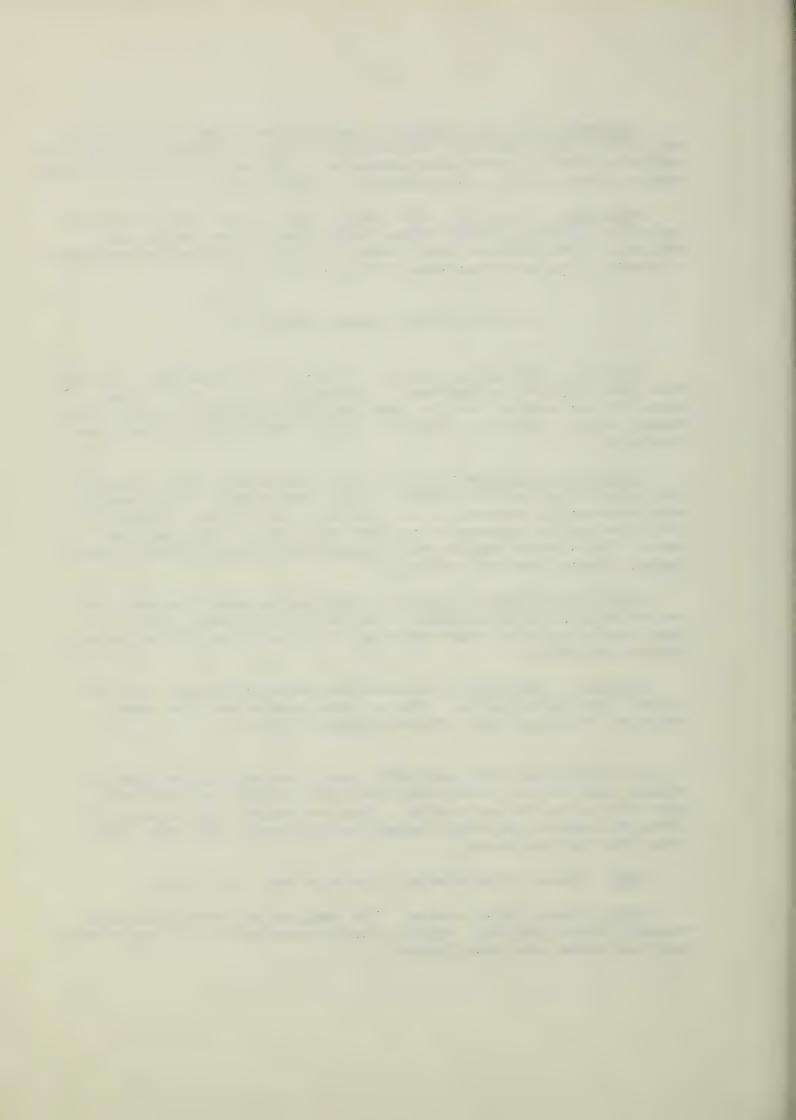
South Dakota (Tables 28 & 29). Forty samples were received from the two stations in South Dakota -- Eureka and Watertown. Six of these samples were the named varieties, Hercules, Leeds, Mindum, Rolette, Wascana, and Wells.

<u>Washington (Table 30)</u>. Seventeen samples were received from the Pullman, Washington station. Five of these samples were the named varieties, Hercules, Leeds, Mindum, Rolette, and Wells.

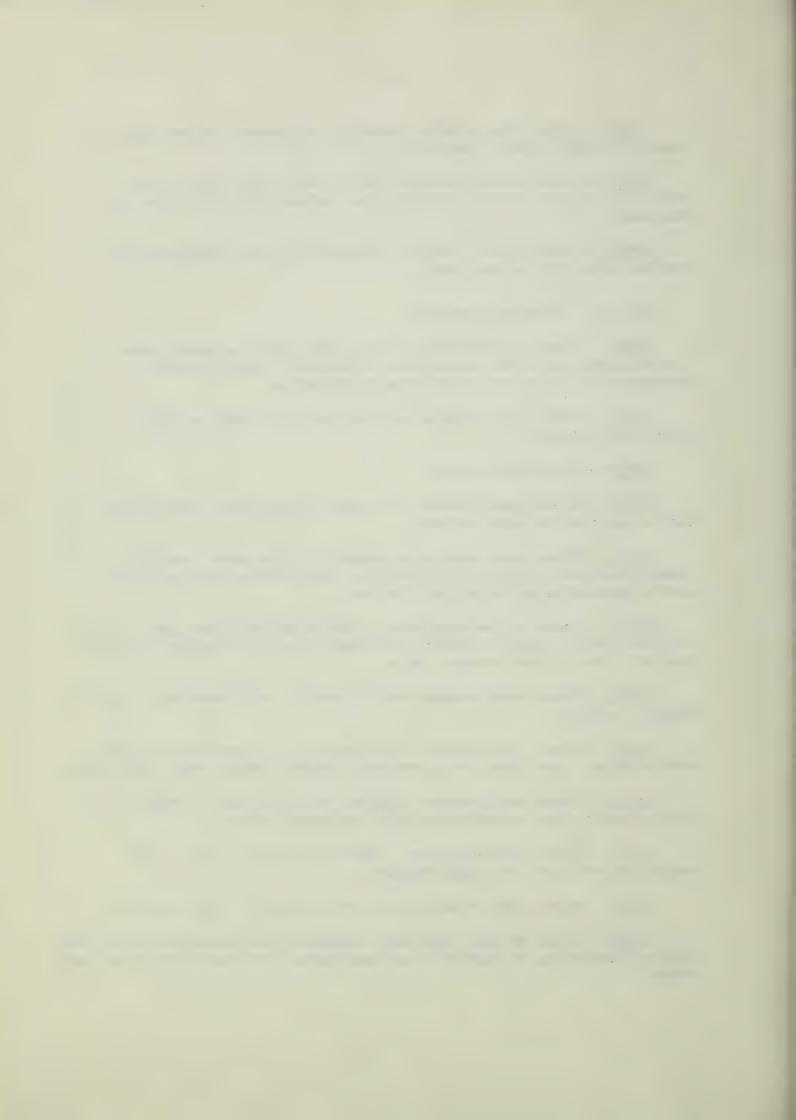
Two selections, D6821 and D6878, were grown only at the Fargo and Langdon stations, and three selections, D6586, D6771, and D6780 were grown only at the Pullman station. These selections will be discussed first, followed by the overall general evaluation for the other selections from the four states.

D6821 - Shows little promise. Low color and slick score.

<u>D6878</u> - Shows little promise. The Fargo series showed a definite tendency towards red color, which is highly undesirable. It has minimum color and kernel size distribution.



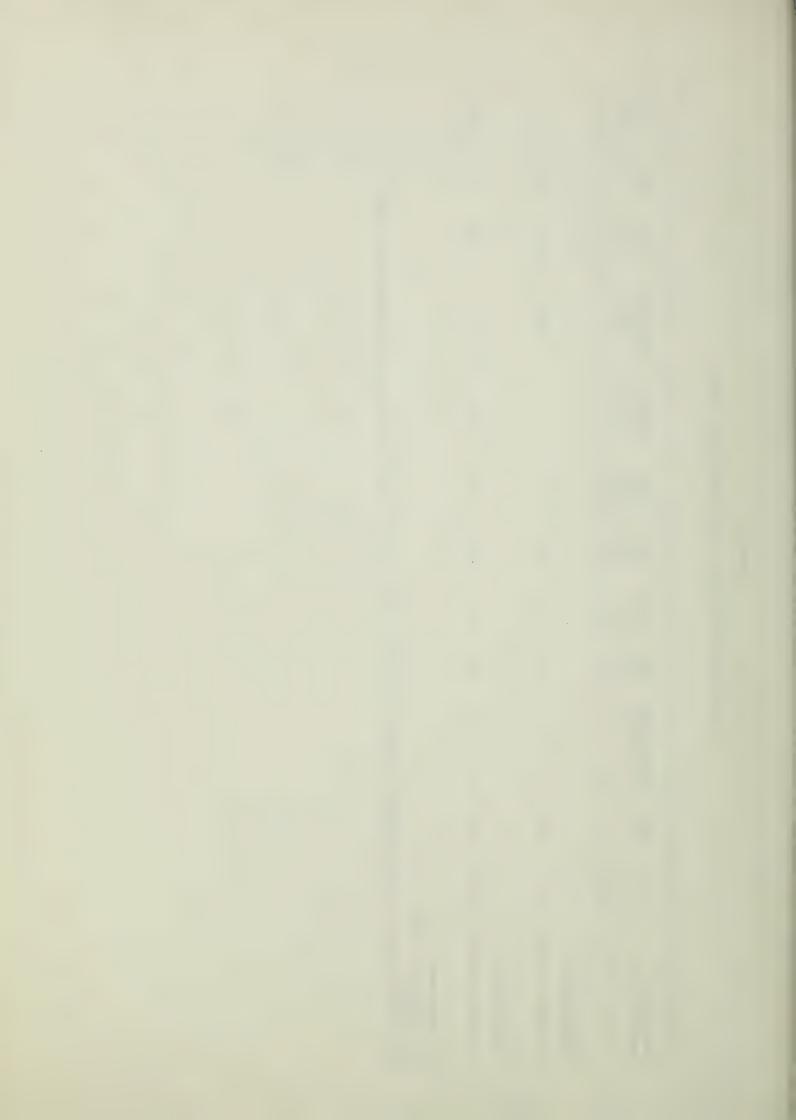
- <u>D6586</u> Shows some promise, however, this selection has shown a tendency toward erratic results.
- <u>D6771</u> Shows little promise, due to poor color score. This selection has been consistently showing minimum color score the past two years.
- $\underline{\text{D6780}}$  Shows little promise, due again to poor extraction and minimum color as the past year.
  - DT 327 Shows good promise.
- <u>D6647</u> Based on three crop years, this selection would show little promise as a new variety due to somewhat erratic results, minimum color score and kernel size distribution.
- D6674 Shows good promise as a new variety, based on three crop years' results.
  - D6676 Shows good promise.
- $\underline{\text{D6714}}$  Shows good promise, although this year the results were not as good as the previous year.
- <u>D6715</u> Shows some promise although this crop year's average results were very close to good promise, the previous crop year did show a minimum kernel size distribution.
- <u>D6718</u> Based on two crop years, this selection shows some promise as a new variety based primarily on kernel size distribution, but this year did tend to have minimum color.
- <u>D6721</u> Shows some promise, due primarily, as in previous years, to erratic results.
- <u>D6722</u> Shows good promise. This year all of the samples showed good promise. Last year, only the South Dakota samples were undesirable.
- <u>D6723</u> Shows good promise. Again, as in the case of D6722, last year's results were undesirable only from South Dakota.
- <u>D6733</u> Shows little promise. Based on two crop years, this selection would not be a good variety.
  - D6761 Shows some promise, based on this year's crop results.
- <u>D6838</u> Based on this crop year's results, this selection would show little promise, due primarily to minimum kernel size distribution and poor color.



<u>D6876</u> - This selection would show some promise as a new variety, but does show a tendency toward minimum kernel size distribution, 1000 kernel weight and color, but this is erratic.



Variety or State Sel. No.	T.W.	1000 Kwt.	Kern Lg.	Kernel Size Lg. Med. Sm.	Sm	Wht. Pro.	Semo. Pro.	Pur. Semo.	Semo. Ash	Specks/ 10 Sq.In.	Dust Color Score	Semo. Abs.	Vis. Color	Tender
	#/Bu.	50	%	%	%	%	%	%	5%			%		
Micro Samples 1971 Durum Standard	62.0	36,3	34	94	2	13.0		48.8		,	95	34.8	9.94	
Macro Samples 1971 Durum Standard	62.0	36,3	34	34 64	2	13.0	12.3	57.9	• 63	. 18,5		31,0	9,75	4.72
1/ Unofficial 2/ 14% Moisture Basis 3/ Purified 4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum score is 88.	s ore not	acceptal	ole, no	rmall	y; how	ever, du	ue to the	excellen	t color t	his crop year	, the minimum	score is	* 80 80	



QUALITY DATA ON ADVANCED YIELD DURUM WHEAT NURSERY SAMPLES

IDAHO

Variety or State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kerne Lg.	Kernel Size Lg. Med. Sm.	Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
		#/Bu.	ė.	%	% %	%	%		. %		Paragraphic and Company
Aberdeen											
Anhinga		64.4	51.5	87	12 1	14.0		75	•	1	
Caste Lde L Monte		9.49	46.1	84	16 0	13.4	52.3	86	1	ı	2
Crane		63.6	48.8	77	22 1	12.0		75	1	1	-
Gerondo		63.0	52.4	82	17 1	14.5	52.3	80	,	ı	2
Leeds		65.0	44.4	75	24 1	15,3		92	34.3	10.0	4
Wandel1	15070	63.3	35.6	32	7 79	11.8		87	. 1	1	့က
NDD 06647		65.5	46.1	72	27 1	13.2		85	,	1	2
NDD 06659		64.5	47.1	92	23 1	13.0	53.4	85	1	1	2
NDD 06660		65.0	52.9	81		13,3		85	1	1	2
NDD 66102		65.5	20.0	78	21 1	12.8				1	ന
M6800127		67.7	45.8	62	36 2	13,1		95	34.7	10.0	4
61-130/Leeds		65.7	48.3	79	20 1	13.2		85	•		7
D-18159-14Y-2C-5X		64.0	48.8	75	25 0	13,1	8*67	88	35,3	0.6	က
D-18162-2R-3M-2Y		63.0	0.64	<b>79</b>	35 1	13,9		85			2
11-20109-2C-12Y-2C- T.Pol.Pi185309/5/Mv54//	fv54//										
N10/B/3/T-g1/4/2*Tc	23	62.2	53.8	62	21 0.	14.3	49.1	80	•	1	2
1/ Unofficial 2/ 14% Moisture Basis 3/ Purified 4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum 5/ 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise.	ssis score not s	acceptable Promise	e, normal	.1y; ho	wever, du ise, 4	normally; however, due to the excel 3 - Some Promise, 4 - Good Promise.	e excellent	color this cr	op year,	the minimum score is 88.	mum 88.

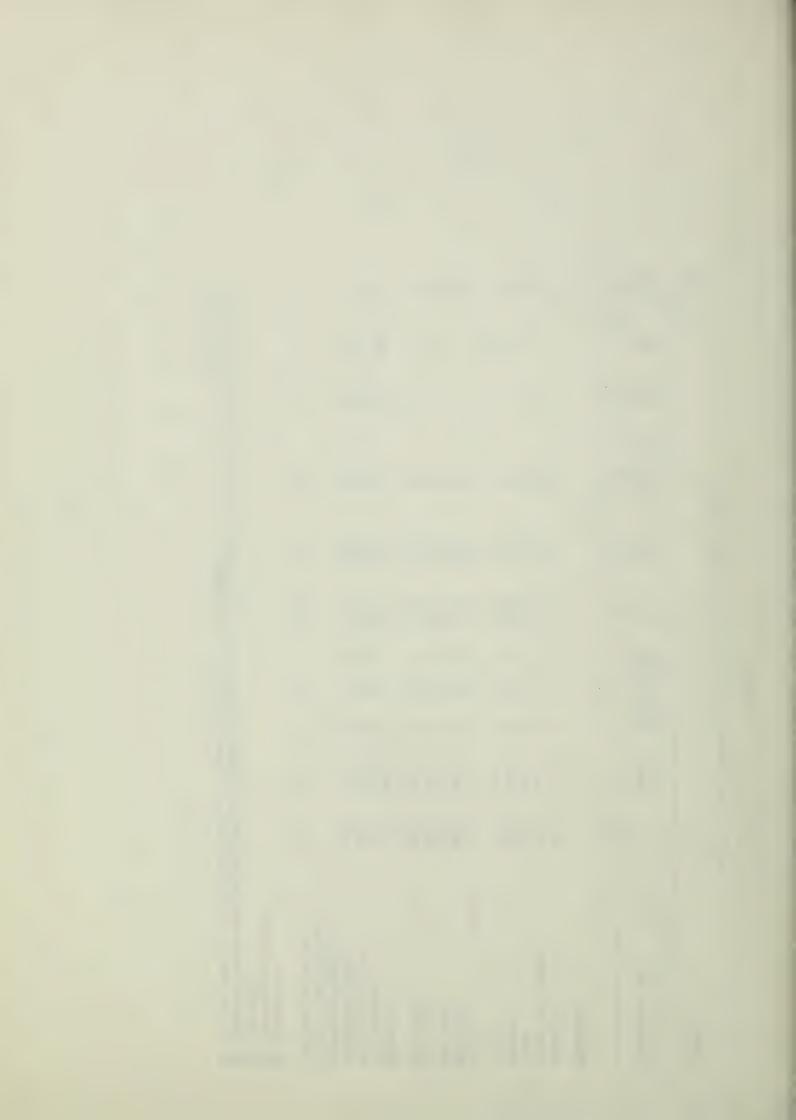


TABLE 3

QUALITY DATA ON ADVANCED YIELD DURUM WHEAT NURSERY SAMPLES

1971 CROP	Tender. Score			5.60 5.30 5.73		4.96 4.60 4.26		4.69		4.84 4.19		5.19		4.68	
197.	Vis. Te			10.0 11.0		8.5 9.0 8.5		10.0 2		10.0		10.5		10.5 4	
	Semo. Abs.	%		32.0 32.0 32.0		32.0 32.0 32.0		32.0 32.0		32.0		32.0 32.0		32.0	
	Specks/ 10 Sq.In.			33		33 27 43		10 *		13		3		10	
	Semo. Ash	%		.71		. 64 . 61 . 61		. 58		.56		.58		.70	
	Pur. Semo.	%		56.2 56.6 54.2		60.6 60.1 59.1		57.0 60.2		56.6		56.1 56.4		55.4	
	Semo. Pro.	%		15.4 16.8 16.6		11.6 11.7 10.3		14.4		14.3		14.0		16.3	
	Wht. Pro.	%		16.4 17.4 17.5		12.7 12.6 11.1		15.5		15.7		15.1 13.9		17.3	
	Sm.	%		5 1 22		4-1-4		9		3.2		9		3	
	el Size Med. Sm.	%		89 94 76		18 25 34		61		36		79		95	
	Kernel Lg. Me	%		9 2 2		81 74 62		33		62		11		1 5	
	1000 Kwt.	8		30.2 30.1 24.2		49.8 45.7 41.0		40.5		42.7 38.9		34.0 31.0		31.1	
	T.W.	#/Bu.		58.1 61.4 57.7		63.9 65.4 65.0		61.3		61.6		62.2		61.5 59.5	
	.°														
	C.I. No.			13768	~	13768		13768		13768		13768		13768	Basis
	r No.		ryland)		[rrigated										Unofficial 14% Moisture Basis Purified
MONTANA	Variety or State Sel. No.		Sidney (Dryland)	Hercules Leeds Wells	Sidney (Irrigated)	Hercules Leeds Wells	Bozeman	Leeds	Creston	Leeds Wells	Havre	Leeds Wells	Moccasin	Leeds	1/ Unoffict 2/ 14% Mois 3/ Purified

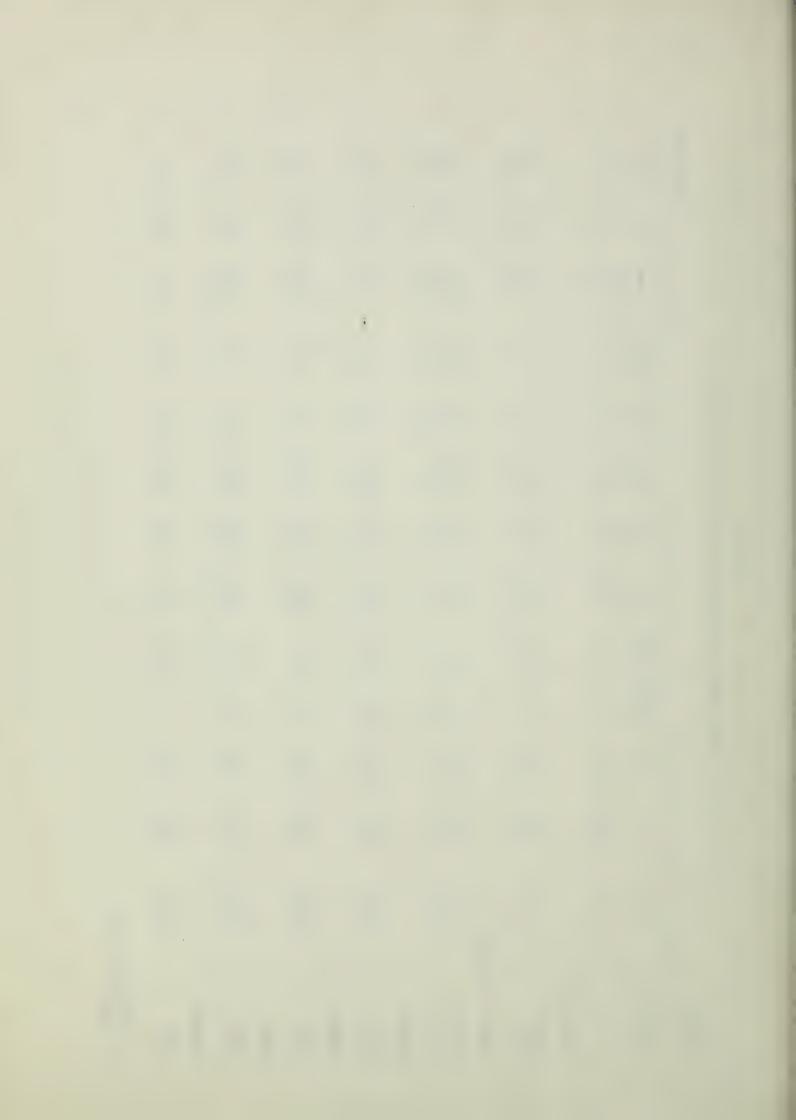


TABLE 4

## QUALITY DATA ON ADVANCED YIELD DURUM WHEAT NURSERY SAMPLES

WASHINGTON

Variety or C.I State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kern Lg.	Kernel Size Lg. Med. Sm.	ze Sm.	Wht. Pro. 2/	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
		#/Bu.	ů	%	%	%	%	%		%		
Royal Slope												
D620769-1		63.0	41,3	51	45	4	12.0	52,1	87	1	٠	2
D620773-1		63.0	38,5	41	55	7	12,3	50.9	98	•	1	2
D620782-2		63.2	44.8	67	30	3	12,9	50.9	87	ı	1	2
D620786-1		65.0	37.5	.45	51	4	12.7	54.4	92	32.7	10.0	4
M6800131		63.5	39.2	94	51	ന	11.7	53.9	86	1	1	2
M6800133		64.5	42.7	19	38	-	13.1	54.4	85	1	ı	2
M6800138		64.5	44.6	09	39	<del></del> 1	13.8	53.2	85	•	,	2
M6800141		0.49	45.4	19	36	က	13.0	52,3	98	1	•	2
M6800145		0.99	41.7	28	40	7	13,5	54.2	98	1	1	2
M6800146		0.49	44.4	09	38	7	12,4	52.8	. 84		•	2
1/ Unofficial 2/ 14% Moisture Basis 3/ Purified 4/ Below 80 color score not acceptable, normally, however due to the excellent color this crop year, the minimum score is 88.	s ore not a - Little	cceptabl	e, norma.	lly, h	owever nise,	due 4	to the expod Promi	kcellent [se.	color this cro	op year,	the minimum	.mum. 88.

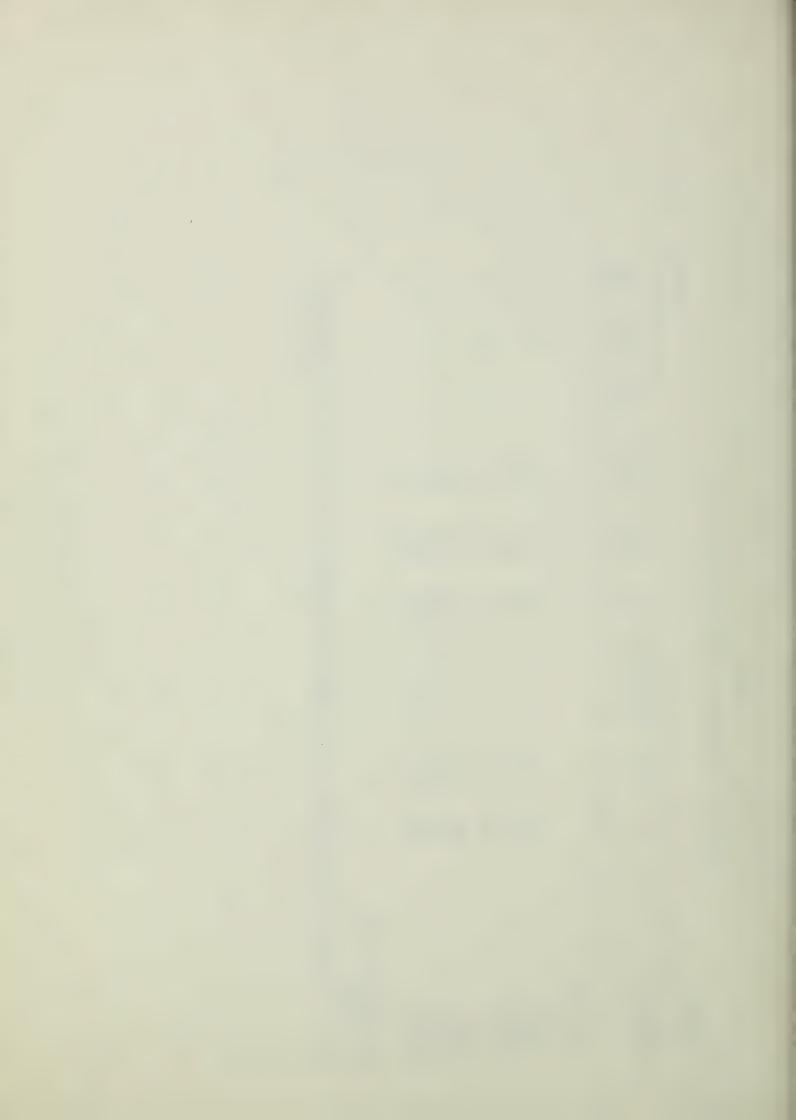
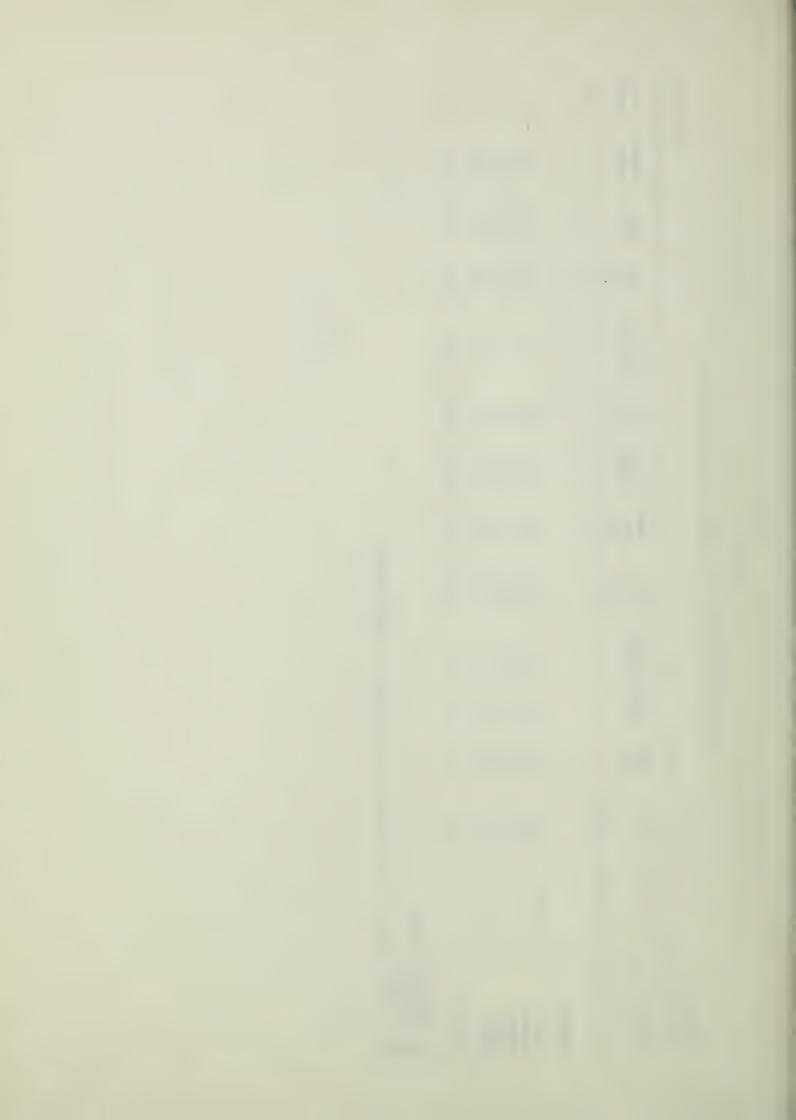


TABLE 5

#### QUALITY DATA ON FIELD PLOT DURUM WHEAT NURSERY SAMPLES

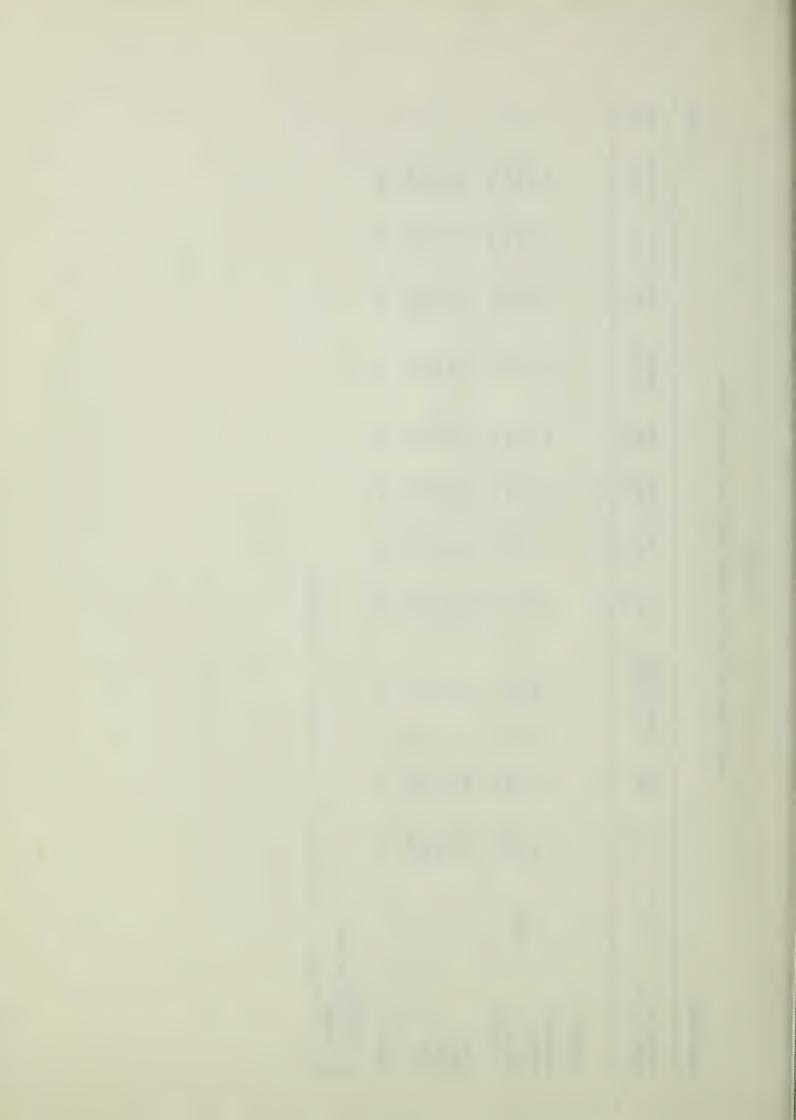
CALIFORNIA														19	1971 CROP
Variety or State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kernel Lg. Me	Med. Sm.	ψle	Wht. Pro. 2/	Semo. Pro.	Pur. Semo.	Semo. Ash	Specks/ 10 Sq.In.	Semo. Abs.	Vis. Color	Tender. Score	Gen. Eval.
		#/Bu.	\$	%	%	%	%	%	%	%		%			
Isleton															
Leeds	13768	63,1	36.8	54	77	2	14.8	13.6	57,1	09:	13	32.0	0.6	3,48	4
ND 6655		63.4	44.1	28	700	2	13.9	12.5	59.1	.61	10	32.0	8.0	3,51	2
D7010		63.0	42.6	53	45	2	14.1	12.9	58.4	,59	7	32.0.	8.0	3.47	2
D7015		62.6	45.0	89	31		12.4	11.1	59.0	.55	13	32.0	7.5	4.24	-4
D7081		63.4	20.0	18	21	-	13.6	12.0	58.8	.57	20	32.0	7.0	3,96	<b>~</b>
к6800718		63.0	45.0 61	19	38	-	13.0	11.5	58.4	•59	17	32.0	8.0	3,35	2
<pre>1/ Unofficial 2/ 14% Moisture Basis 3/ Purified 4/ 1 - No Promise, 2 - Little Promise, 3 - Some Promise,</pre>	Basis e, 2 - Little	Promise,	3 = Some	Promi	_	e Good	4 - Good Promise.	•							



# QUALITY DATA ON FIELD PLOT DURUM WHEAT YIELD NURSERY SAMPLES

CALIFORNIA

Variety or State Sel. No.	C.I. No.	T.W. 1/ #/Bu.	1000 Kwt.	Kernel Lg. Me	Med. Sm.	Sm. %	Wht. Pro. 2/ %	Semo. Pro. 2/	Pur. Semo. 3/	Semo. Ash 2/	Specks/ 10 Sq.In.	Semo. Abs. 2/	Vis. Color	Tender. Score	Gen. Eval.
Tulelake															
Albatross Grane A. Leeds NDD 6644 Acc 63038	13768	62.2 65.7 65.3 63.2	52.7 42.2 40.3 48.1 33.8	73 68 52 77 23	25 31 47 22 73	21114	11.0 9.5 11.3 11.1	0 0 0 0 0 0 0 0 0 0	59.2 57.9 59.5 58.5	.66 .63 .62 .57	13 10 10 17	32.0 32.0 32.0 32.0	7.5 7.5 9.5 8.0	3,68 3,20 3,19 3,70	T H 4 7 7 4
D7064 D7067 D7068 D7073		62.8 63.1 63.7 63.7	48.8 48.1 46.7 38.2 48.1	78 86 76 52 84	21 12 23 46 15	12121	10.2 11.7 10.7 9.5	8.7 10.3 9.2 8.2 9.6	59.3 57.5 60.7 57.9 59.0	. 71 . 61 . 61 . 61	13 13 13 13	32.0 32.0 32.0 32.0	7.5 7.0 7.0 7.0	3.51 3.64 2.88 2.90	мннн
K6800719		64.7	47.1	74	24	2	10.8	9.6	58,5	.52	10	32.0	8.0	3,41	m
<pre>1/ Unofficial 2/ 14% Moisture Basis 3/ Purified 4/ 1 - No Promise, 2</pre>	Moisture Basis Purified L - No Promise, 2 - Little Promise, 3 - Some Promise,	Promise,	3 - Some	Prom'		600	4 - Good Promise.								



Variety or State Sel. No.	C.I. No.	D. T.W.	1000 Kwt.	Kernel Lg. M	ed	Size 1. Sm.	Wht. Pro. 2/	Semo. Pro.	Pur. Semo.	Semo. Ash	Specks/ 10 Sq.In.	Semo. Abs.	Vis. Color	Tender. Score	Gen. Eval. 4/
		#/Bu.	1. 8.	%	%	%	%	%	%	%		%			
Carrington (Dryland)	(pu														
Hercules		64.1		74	26	0	10.5	9.5	56.9	09.	17	32.0	0.6	4.38	<b>رب</b>
Leeds	13768	65.7	7 42.6	61	39	00	11.1	10.3	56.7		13	32.0 32.0	10.0	3.42 3.04	<b>4</b> 4
Wells	13333	64.5		94	53		10.2	9.4	54.1	09.	17	32.0	10.0	3,41	40
D6647		64.5		99	34	0	10.0	9.2	56.9	. 58	17	32.0	α 	3,42	7
D6674		8.49		. 68	32	0	11.1	10.1	58.7	• 59	20	32.0	10.5	3,32	4
D6676		65.7		99	33	<del>, ,</del> ,	10.6	ص م ه ا	57.8	•59	20	32.0	10.5	3,30	4.
D6714		64.7	42.2	58	45	0 -	10.6	10.2	58.2	63	17 20	32.0	10.0	3,54 4,05	<b>4</b> 4
D6718		9.49		67	33	0	10.7	9.7	56.0	.58	17	32.0	9,5	3.08	· m
D6721		64,1		62	37	-	12.2	11.2	58.8	09.	27	32.0	9.5	3.79	က
D6722		64.2	8.44.8	63	37	0	11.9	11.1	57.8	.62	20	32.0	10.0	3,34	4 <
D6733		64.6		61	39	0	12,2	11.2	56.8	.58	17	32.0	10.0	3,55	† 4
D6761		63.5		62	37	-	12.9	11.7	56.7	.59	17	32.0	9.5	3.57	m
1/ Unofficial $\frac{1}{2}$ / 14% Moisture Basis $\frac{3}{4}$ / Purified $\frac{3}{4}$ / 1 - No Promise, 2 - Little Promise, 3 - Some Promise,	Basis e, 2 - Li	ttle Promi	ise, 3 - Sa	me Pron		0 1	4 - Good Promise.	o u							

Unofficial 14% Moisture Basis Purified 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise.

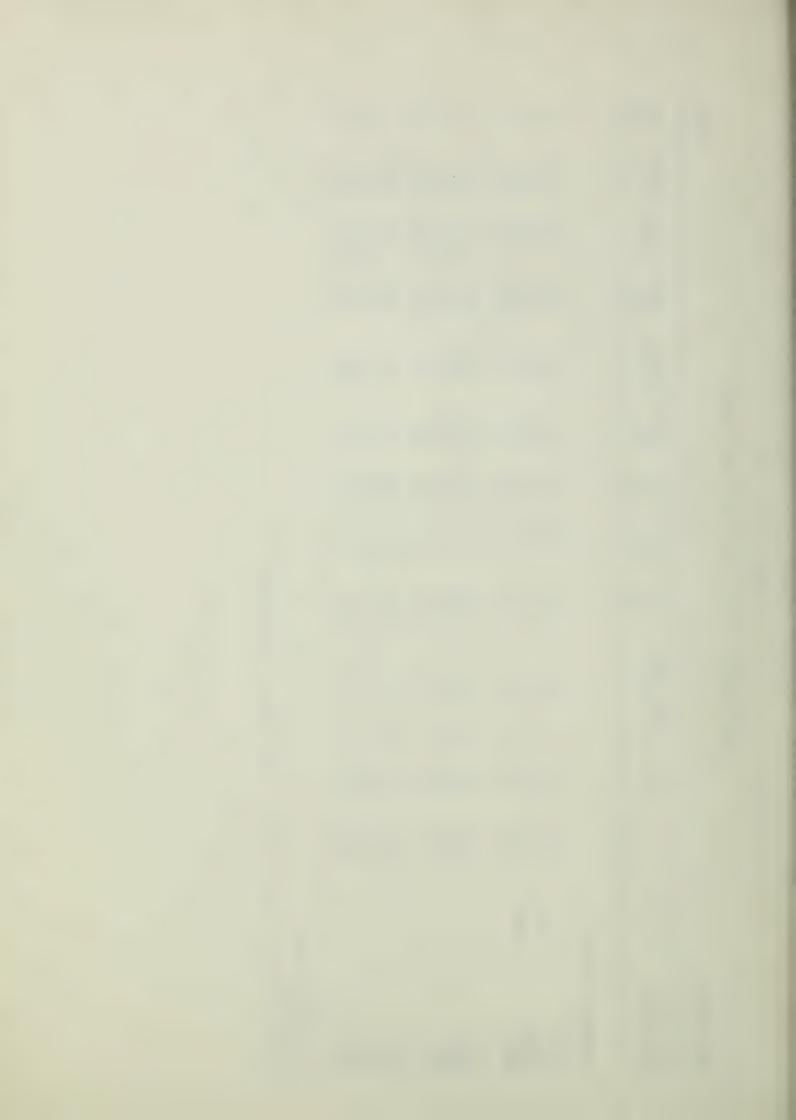


TABLE 8

### QUALITY DATA ON FIELD PLOT DURUM WHEAT NURSERY SAMPLES

1971 CROP	Gen. Eval.			4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	Tender. Score			4.22	4.36	4.06	4.00	4.03	3,68	4.10	3,75	4.07	4.58	4.60	3,79	3,99	4.10	3,49	
	Vis. Color			10.0	9.5	9.5	10.0	9.5	10.0	10.0	10.0	10.0	9.5	9.5	10.5	10.5	10.0	10.0	
	Semo. Abs.	%		32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	
	Specks/ 10 Sq.In.			13	17	13	20	13	17	10	17	20	13	17	7	10	17	10	
	Semo. Ash	%		.63	99*	.62	• 65	• 62	.61	.61	• 65	99.	<b>•</b> 64	.61	.63	09.	.62	09.	
	Pur. Semo.	%		58.9	56.4	57.5	57.3	58.2	57.4	58.3	57.8	59.3	56.7	59.4	57.5	56.6	58.1	58.4	
	Semo. Pro.	%		10.2	11,8	11,1	10.6	6.7	10.4	10.5	10,1	10,3	11.5	10.9	9.7	9.7	9.7	9°6	
	Wht. Pro.	%		11,3	12,2	12,1	12.0	10.7	11.4	11,3	11.2	11,3	12,4	11.7	10,5	10.8	10.6	10.4	
	Size 1. Sm.	%		0	0	-	<b>,-</b> 4	-	7	-1				0	0	0	0	0	
	1 %	%		17	36	23	56	36	25	21	27	25	29	26	30	22	32	23	
	Kernel Lg. M	%		83	99	9/	43	63	74	78	72	74	20	74	70	78	99	77	
	1000 Kwt.	50		50.8	42.6	47.8	36.5	44.2	46.1	46.1	47.6	45.7	45.7	45.7	43.5	46.1	42.2	50.5	
	T.W.	#/Bu.		8**99	64.8	9**99	64.3	64.5	6,49	65,3	65.5	64.7	64.7	4.49	64.8	66.1	0.99	65.1	
	No.				~		_												
	C.I. No.		ted)		13768		13333												
NORTH DAKOTA	Variety or State Sel. No.		Carrington (Irrigated)	Hercules	Leeds	Rolette	Wells	D6647	D6674	D6676	D6714	D6715	D6718	D6721	D6722	D6723	D6733	D6761	

Unofficial
14% Moisture Basis
Purified
1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise.

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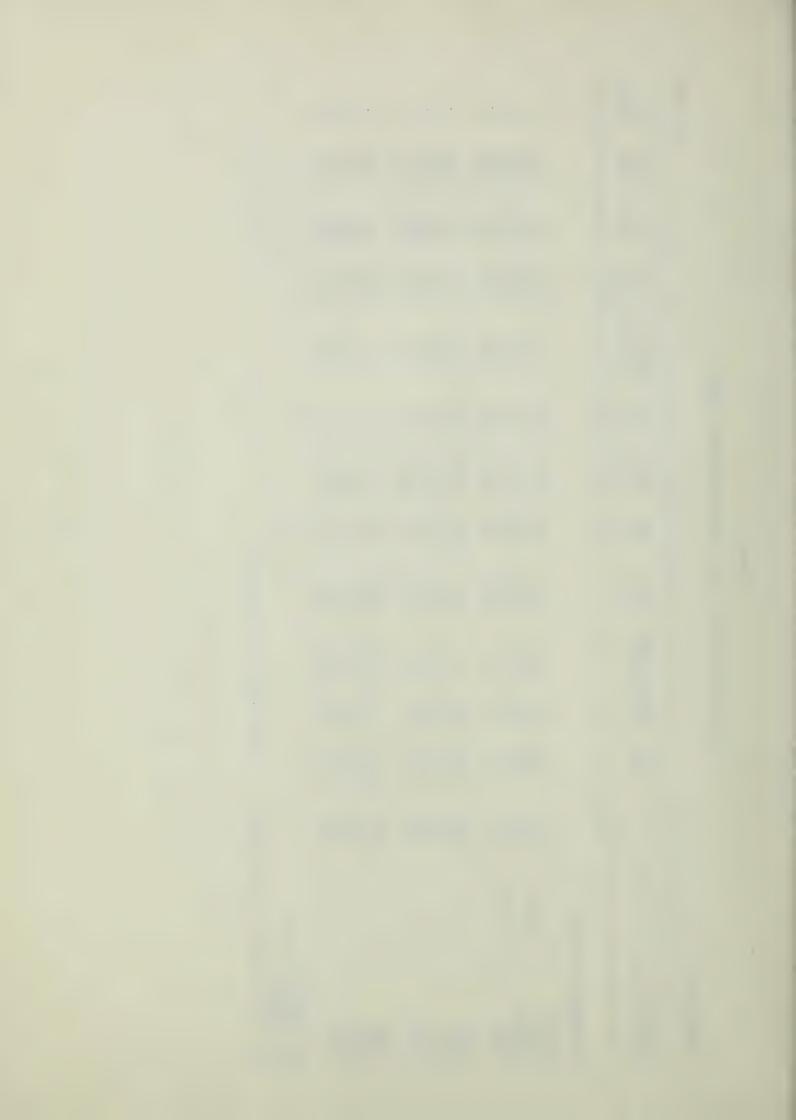


TABLE 9

QUALITY DATA ON INTERNATIONAL YIELD DURUM WHEAT NURSERY SAMPLES

CALIFORNIA	.*									!				19.	1971 CROP
Variety or State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kernel Lg. Me	el Size Med. Sm.		Wht. Pro. 2/	Semo. Pro.	Pur. Semo.	Semo. Ash	Specks/ 10 Sq.In.	Semo. Abs.	Vis. Color	Tender. Score	Gen. Eval.
Davis		#/Bu.	ထိ	200	<b>6</b> %	%	8	%	%	%		%			
Crane 'S' A Crane 'S' B		64.1	45.2	60	38	2 10	0.4	9.5	54.1	. 55	13	32.0	8.0	4.49	
Jori C-69 Leeds S-9	13768	63.6 63.6 62.6	56.8 37.5 40.0	84 48 58	15 51 40		12.5 13.5 11.4	11.4 12.7 10.5	57.3 59.3 57.2	.59 .65 .68	10 17	32.0 32.0 32.0	7.5 10.0 10.0	4.37 4.68 4.50	7 7 7
(BYe <sup>2</sup> -Tace*Tc <sup>4</sup> )*(BYe-Tc*Stw .x AH gib) Rae-Tc <sup>4</sup> *(Stw63*AA sib) T.dic Vernum (TMc-Tc <sup>2</sup> *2-B*W)	Ye-Tc*Stw .sib) -Tc <sup>2</sup> *2-B*W)	62.5 62.8 64.1	49.2 49.5 37.6	73 70 49	25 28 48	32.5	11.2 10.2 9.6	10.2 9.2 9.0	61.4 58.0 58.7	. 62 . 63	10 17 7	32.0 32.0 32.0	8.0 6.5 7.5	4.68 4.37 3.94	rd rd rd
<pre>1/ Unofficial 2/ 14% Moisture Basis 3/ Purified 4/ 1 - No Promise, 2</pre>	Unofficial 14% Moisture Basis Purified 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise.	Promise,	3 - Some	Promi	se, 4	poog -	Promise.								

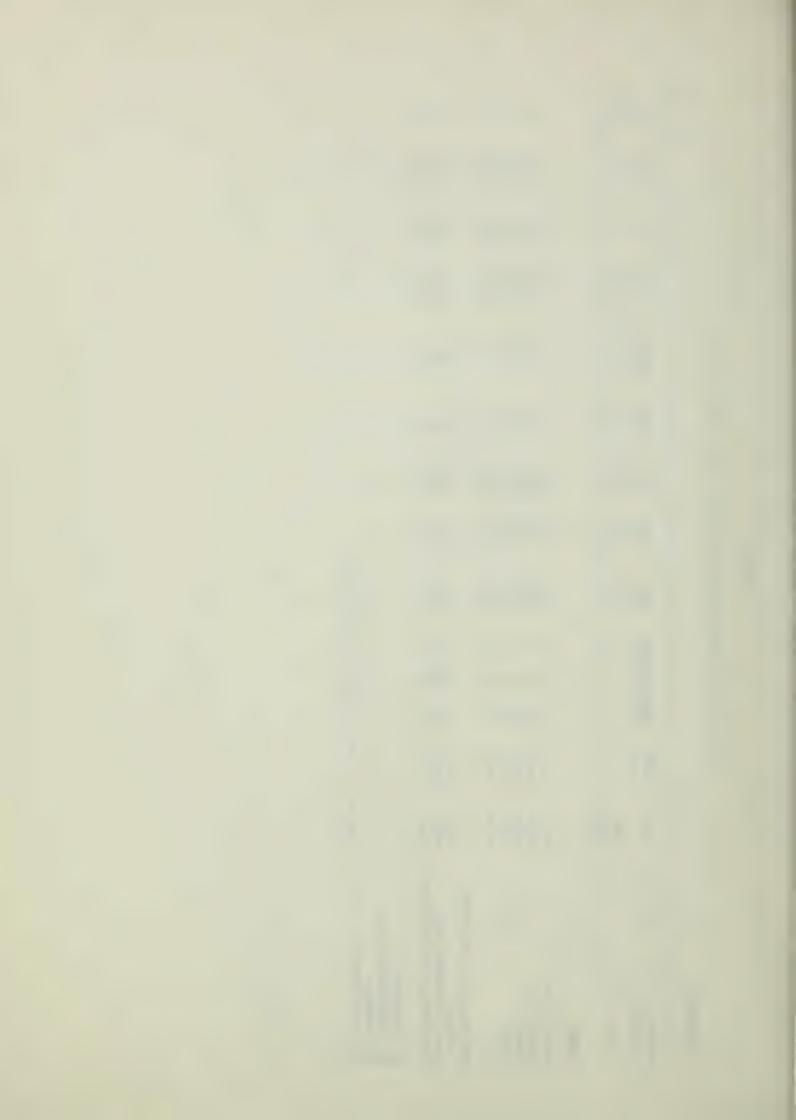


TABLE 10

# QUALITY DATA ON INTERNATIONAL YIELD DURUM WHEAT NURSERY SAMPLES

- 466 - 467 - 466 - 467 - 466 - 467 - 466 - 467 - 466 - 467 - 467 - 466 - 467 - 466 - 467 - 466 - 467 - 466 - 467 - 466 - 467 - 466 - 467 - 468 - 470	State Sel. No.	T.W.	1000 Kwt.	Kernel Lg. Me	s pa	Size Sm.	Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
(A) 65.0 51.0 78 21 13.2 52.9 80-R - 62.5 49.0 73 26 1 12.5 52.3 82 - 62.5 64.0 73 26 1 12.5 52.3 82 - 64.5 50.5 82 17 1 13.1 51.1 90 37.0 64.0 64.0 51.5 41.8 57 42 1 11.9 51.6 80 - 64.0 51.5 79 20 1 13.3 55.0 80 - 64.0 57.5 86 13 1 13.1 52.3 80 - 64.0 57.5 86 13 1 13.1 52.3 80 - 64.0 57.5 86 13 1 13.1 52.3 80 - 64.0 57.5 86 13 1 13.1 52.3 80 - 64.0 57.5 86 13 1 13.1 52.3 80 - 64.0 57.5 86 13 1 13.2 55.0 80 - 64.0 57.5 86 13 1 13.2 55.0 80 - 65.0 64.0 57.5 86 13 1 13.2 55.0 80 - 64.0 57.5 86 13 1 13.2 57.0 80 - 64.0 57.5 86 13 1 12.2 52.3 80 36.3 62.5 64.0 64.0 64.0 64.0 57.5 84 15 1 12.2 52.3 89 37.7 64.0 64.0 42.9 63 36 1 12.2 52.3 89 37.7 64.0 64.0 42.9 63 36 1 12.2 52.3 89 37.7 64.0 64.0 64.0 42.9 63 36 1 12.2 52.3 89 37.7 64.0 64.0 64.0 50.0 78 72 1 12.3 54.1 83 - 62.5 64.0 50.0 78 72 1 12.3 54.1 73 7 22 1 12.4 53.8 78 - 62.0 50.8 74 25 1 12.4 53.8 78 - 62.0 50.8 74 25 1 12.4 53.8 78 - 62.0 50.8 73 25 2 11.4 53.6 70 - 75 - 75 - 75 - 75 - 75 - 75 - 75 -		#/Bu.	٠.	%	%	%	%	%		%		
(A) 65.0 51.0 78 21 1 13.2 52.9 80-R - 64.5 49.0 73 26 1 12.5 52.3 82 3 7.0 64.0 65.5 49.0 73 26 1 12.5 52.3 82 3 7.0 64.0 65.5 41.8 57 42 1 11.9 51.6 80 - 7 64.0 51.5 84 15 11.9 51.6 80 - 7 65.0 64.0 57.5 86 13 1 13.1 52.3 80 - 7 65.0 65.0 45.0 63.0 49.8 75 24 1 13.5 55.0 85 - 7 65.0 65.0 45.0 63.0 45.0 63.0 13.1 52.3 80 - 7 65.0 64.0 57.5 86 13 1 13.1 52.3 80 - 7 65.0 64.0 57.5 86 13 1 13.1 52.3 80 36.3 11.3 55.0 87 - 7 65.0 64.0 63.5 37.5 33 64 3 11.3 54.3 88 36.3 11.3 52.7 88 1 11.7 53.6 88 1 11.7 53.6 88 1 11.7 53.6 88 1 11.2 82.3 82 1 11.2 82.3 82 1 11.2 82.3 82 1 11.2 82.3 82 1 11.3 82.4 83 1 11.3 83.6 82 1 11.3 83.6 82 1 11.3 83.6 82 1 11.3 83.6 82 1 11.3 83.6 83.6 83 86 1 11.3 83.6 83.6 83.6 83.6 83.6 83.6 83.6 83	ullman											
(A) 64.5 59.0 73 26 1 12.5 52.3 82 - 64.5 50.5 69.5 82 17 1 13.1 51.1 90 37.0 64.5 50.5 82 17 1 13.1 51.1 90 37.0 64.5 50.5 82 17 1 13.1 51.1 90 37.0 62.5 41.8 57 42 1 11.9 51.6 80 - 64.0 51.5 86 13 1 13.3 55.0 88 - 64.0 57.5 86 13 1 13.1 52.3 80 - 64.0 57.5 86 13 1 13.1 52.3 80 - 64.0 57.5 86 13 1 13.1 52.3 80 - 64.0 57.5 86 13 1 11.7 53.6 87 - 65.0 45.0 71 28 1 14.1 50.7 90 36.3 - 64.0 45.0 63 36 1 11.7 53.6 87 - 64.0 49.3 69 30 1 11.7 53.6 88 36.3 - 64.0 49.3 69 30 1 11.4 53.6 88 37.7 64.0 49.3 69 30 1 11.4 53.6 88 37.7 64.0 49.3 69 30 1 11.4 53.6 89 - 64.0 48.8 77 22 1 12.3 54.1 83 - 64.0 65.0 48.8 77 22 1 12.3 54.1 83 - 64.0 65.0 48.8 77 22 1 12.4 53.8 78 - 64.0 50.8 74 25 1 12.4 53.8 78 - 64.0 50.8 74 25 1 12.4 53.8 78 - 64.0 50.0 50.8 74 25 1 13.0 52.3 88 79	nhinga 'S'	65.0	51.0	78	21	<del>, </del>	13.2	52.9	80-R	ı	i	2
(A) 64.5 50.5 82 17 1 13.1 51.1 90 37.0 (B) 62.5 41.8 57 42 1 12.0 53.4 80 - 62.5 41.8 57 42 1 12.0 53.4 80 - 62.5 41.8 57 42 1 13.5 55.0 80 - 64.0 51.5 79 20 1 13.3 55.0 85 - 64.0 57.5 86 13 1 13.1 52.3 80 - 64.0 57.5 86 13 1 13.1 52.3 80 - 64.0 57.5 86 13 1 13.1 52.3 80 - 64.0 64.0 57.5 86 13 1 13.1 52.3 80 - 64.0 64.0 57.5 84 15 1 13.2 51.8 85 - 62.5 64.0 45.0 71 28 1 14.1 50.7 90 36.3 37.7 64.0 40.7 61 2 3 11.3 54.3 88 36.3 64.0 40.7 61 2 3 11.3 54.3 88 36.3 64.0 40.7 61 2 3 11.3 54.3 89 37.7 64.0 40.7 61 2 3 1 12.2 52.3 89 37.7 62.5 56.2 83 16 1 12.2 52.3 89 37.7 62.5 56.2 83 16 1 12.3 53.6 80 - 64.0 49.3 69 30 1 11.4 53.6 80 - 64.0 49.3 69 30 1 11.4 53.6 80 - 64.0 48.8 77 22 1 12.3 54.1 83 - 65.0 48.8 77 22 1 12.3 54.1 83 - 65.0 65.0 48.8 77 22 1 12.3 54.1 83 - 65.0 65.0 44.8 65 34 1 13.0 52.3 82 78 - 65.0 64.0 52.6 83 16 1 13.0 52.3 82 78 - 66.0 63.5 50.0 73 25 2 11.4 53.6 77 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	rant 'S'	62.5	49.0	. 73	56	-	12.5	52.3	. 82		1	2
(A) 64.0 45.7 69 30 1 12.0 53.4 80  - 2 - 466 63.0 49.8 75 24 1 11.9 51.6 80  - 2 - 466 63.0 49.8 75 24 1 11.9 51.6 80  64.0 51.5 79 20 1 13.3 55.0 80  64.0 51.5 79 20 1 13.3 55.0 80  - 65 13768 65.0 71 28 1 14.1 50.7 90 36.3  - 65 1375 33 64 3 11.3 54.3 88 36.3  15070 63.5 37.5 33 64 3 11.3 54.3 88 36.3  15070 64.0 56.5 84 15 1 13.2 51.8 85  64.0 40.7 61 37 2 13.0 52.7 87  64.0 40.7 61 37 2 13.0 52.7 87  1808  1809  18	apeiti	64.5	50.5	82	17	<del></del> -	13.1	51.1	06	37.0	0.6	က
- 2 - 466	rane 'S' (A)	64.0	45.7	69	30		12.0	53.4	080	1	ı'	7 0
65 64.0 51.5 79 20 1 13.5 55.0 80 - 64.0 57.5 86 13 1 14.1 52.3 80 - 65.0 45.0 63 26 1 11.7 53.6 87 - 13768 65.0 45.0 63 36 1 11.7 53.6 87 - 15070 64.0 56.5 84 15 1 11.7 53.6 87 - 15070 64.0 40.7 61 37 2 11.2 51.8 88 36.3 64.0 40.7 61 37 2 11.2 52.3 89 37.7 864.0 49.3 69 30 1 11.4 53.6 89 - 8 7 7 22 1 12.9 51.6 89 - 8 7 7 22 1 12.9 51.6 89 - 8 7 8 7 22 1 12.3 54.1 83 - 8 8 7 8 7 2 1 12.3 54.1 83 - 8 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	rane S (b)	6.20	41.0	/0	7 4 7	-4	11.9	9776	90	1	ı	7
64.0 51.5 79 20 1 13.3 55.0 85 -  64.0 57.5 86 13 1 13.1 52.3 80 -  65.0 45.0 71 28 1 14.1 53.6 87 -  65.0 45.0 71 28 1 14.1 53.6 87 -  15070 63.5 37.5 33 64 3 11.3 54.3 88 36.3  15070 63.5 37.5 33 64 3 11.3 54.3 88 36.3  64.0 40.7 61 37 2 13.0 52.7 87 -  64.0 40.9 63 36 1 12.2 52.3 89 37.7  864.0 42.9 63 36 1 12.2 52.3 89 37.7  8 64.0 49.3 69 30 1 11.4 53.6 80 -  7 7 7 22 1 12.3 54.1 83 -  8 7 7 22 1 12.3 54.1 83 -  8 7 7 22 1 12.3 54.1 83 -  8 7 7 22 1 12.3 54.1 83 -  8 8 7 7 22 1 12.3 54.1 83 -  1333 64.0 58.8 79 20 1 12.3 54.1 83 -  8 8 7 7 22 1 12.3 54.1 78 -  90 36.3 64.0 56.8 74 25 1 12.4 53.8 78 -  8 8 7 7 22 1 12.3 54.1 73 -  1337 64.0 52.6 83 16 1 13.0 52.3 82 -  1348 64.0 52.6 83 16 1 13.0 52.3 82 -  135.6 75 -  137.7 55 -  137.8 54.3 89 36.3 -  137.7 55 -  137.7 5	erondo V - 2 - 466	63.0	8.64	7.5	24		13.5	55.0	80	1	١	2
65 13768 64.0 57.5 86 13 1 13.1 52.3 80 - 65 63.0 45.0 71 28 1 14.1 50.7 90 36.3 65 63.0 45.0 63 36 1 11.7 53.6 87 - 64.0 56.5 84 15 1 13.2 51.8 85 - 115070 63.5 37.5 33 64 3 11.3 54.3 88 36.3 64.0 40.7 61 37 2 13.0 52.7 87 - 64.0 42.9 63 36 1 12.2 52.3 89 37.7  864.0 42.9 63 36 1 12.2 52.3 89 37.7  8 64.0 42.9 63 36 1 12.2 52.3 89 37.7  8 7 TC/LAK)  8 62.5 47.1 77 22 1 12.9 51.6 78 - 12.1 53.0 78 - 13.1 53.0 51.0 76 23 1 12.4 53.8 78 - 13.1 5TC/LAK)  8 X TCL/TC2) 8 X TCL/TC2) 90 36 1 12.3 53.0 78 - 12.1 55.0 50.8 74 25 1 12.4 53.8 78 - 13.1 55.0 50.0 73 25 2 11.4 53.6 70 - 13.1 53.6 75 - 13.1 53.6 75 - 13.1 53.6 75 - 13.1 53.6 75 - 13.1 53.6 75 - 13.1 53.6 75 - 13.1 53.6 75 - 13.1 53.6 75 - 13.2 52.1 53.6 75 - 13.3 53.0 78 - 13.4 53.6 75 - 13.4 53.6 75 - 13.4 53.6 75 - 13.4 53.6 75 - 13.4 53.6 75 - 13.4 53.6 75 - 13.4 53.6 75 - 13.4 11.1 53.6 75 - 13.1 53.6 75 - 14.1 53.6 75 - 15.1 53.6 75 -	ercules		51.5	62	20	Н	13.3	55.0	85	1		7
65 13768 65.0 45.0 71 28 1 14.1 50.7 90 36.3 65.0 45.0 63.0 45.0 63 36 1 11.7 53.6 87 - 64.0 56.5 84 15 1 13.2 51.8 85 - 62.5 56.2 83 16 1 12.8 53.4 83 - 64.0 40.7 61 37 2 13.0 52.7 87 - 64.0 40.7 61 37 2 13.0 52.7 87 - 64.0 40.9 63.5 64.0 40.3 69 30 1 11.4 53.6 80 - 7 CT	1	64.0	57.5	98	13	Н	13.1	52.3	80		1	7
65 63.0 45.0 63 36 1 11.7 53.6 87 -  15070 63.5 37.5 84 15 1 13.2 51.8 85 -  15373 64.0 40.7 61 37 2 13.0 52.7 87 -  64.0 40.7 61 37 2 13.0 52.7 87 -  64.0 40.2 63 36 1 11.4 53.6 80 -  18 62.5 47.1 77 22 1 12.9 51.6 78 -  - TC)  x TC(4) (BY2E -  62.0 50.8 74 25 1 12.4 53.8 78 -  (Z - B X W) 63.0 51.0 76 23 1 13.2 51.1 75 -  8 X TC(4) TC(2)		65.0	45.0	71	28	-	14.1	50.7	90	36.3	10.0	4
15070 64.0 56.5 84 15 1 13.2 51.8 85 - 15070 63.5 37.5 64 3 11.3 54.3 88 36.3 13333 64.0 40.7 61 37 2 13.0 52.7 87 - 62.5 56.2 83 16 1 12.8 53.4 83 - 64.0 42.9 63 36 1 12.2 52.3 89 37.7  Leeds  Leeds  E - TC)  ME - TC/LAK)  E X TC4) (BYZE - 62.0 50.8 74 25 1 12.3 54.1 83 -  2 (Z - B X W) 63.0 51.0 76 23 1 13.0 52.3 82 -  2 (Z - B X W) 63.0 51.0 76 23 1 13.0 52.3 82 -  2 (Z - B X W) 63.0 52.6 83 16 1 13.0 52.3 82 -  13.0 52.3 82 79 70 7  2 (Z - B X W) 63.0 52.6 83 16 1 13.0 52.3 82 -  13.0 52.3 82 79 70 70 70 70 70 70 70 70 70 70 70 70 70	viachic C - 65	63.0	45.0	63	36	H	11.7	53.6	87		ı	7
15070 63.5 37.5 33 64 3 11.3 54.3 88 36.3 11.3 1333 64.0 40.7 61 37 2 13.0 52.7 87 - 62.5 56.2 83 16 1 12.8 53.4 83 - 64.0 40.7 61 37 2 13.0 52.7 87 - 64.0 42.9 63 36 1 12.2 52.3 89 37.7 62.5 47.1 77 22 1 12.9 51.6 78 - 62.0 48.8 77 22 1 12.9 51.6 78 - 62.0 50.8 79 20 1 12.3 53.0 78 - 62.0 50.8 74 25 1 12.4 53.8 78 - 62.0 50.8 74 25 1 12.4 53.8 78 - 62.0 50.8 74 25 1 13.2 51.1 75 - 62.0 64.0 52.6 83 16 1 13.0 52.3 82 - 62.0 50.0 73 25 2 11.4 53.6 70 - 65.0 44.8 65 34 1 11.1 53.6 75 - 65.0 44.8 65 34 1 11.1 53.6 75 - 65.0 44.8 65 34 1 11.1 53.6 75 - 67.0 44.8 65 34 1 11.1 53.6 75 - 67.0 44.8 65 34 1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 75 - 67.0 47.8 65.0 47.1 11.1 53.6 75 - 67.0 75 -	ehuacan 60	64.0	56.5	84	15	-	13.2	51.8	85	1	ı	2
125 1333 64.0 40.7 61 37 2 13.0 52.7 87 -  126.2 56.2 83 16 1 12.8 53.4 83 -  64.0 42.9 63 36 1 12.2 52.3 89 37.7  127 - 948  128 54.0 49.3 69 30 1 11.4 53.6 80 -  62.5 47.1 77 22 1 12.9 51.6 78 -  128 77 22 1 12.9 54.1 83 -  128 77 22 1 12.3 54.1 83 -  128 77 22 1 12.3 54.1 83 -  128 78 -  128 79 20 1 12.3 53.0 78 -  128 78 -  129 51.6 78 -  120 51.0 76 23 1 13.2 51.1 75 -  120 64.0 52.6 83 16 1 13.0 52.3 82 -  120 64.0 44.8 65 34 1 11.1 53.6 75 -  120 75 -  120 75 -  120 75 -  120 75 -  120 75 -  120 78 -  12		63.5	37.5	33	99	m	11.3	54.3	88	36.3	10.0	4
125 62.5 56.2 83 16 1 12.8 53.4 83 - 64.0 42.9 63 36 1 12.2 52.3 89 37.7  11 64.0 49.3 69 30 1 11.4 53.6 80 - 12 - 948  12 - 948  13 - 12.9 51.6 78 - 14 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.6 78 - 15 - 12.9 51.0 76 23 1 13.2 51.1 75 - 16 - 10.0		0.49	40.7	61	37	2	13.0	52.7	87	ı	1	2
9 5101 5101 5102 - 948 5102 - 948 5102 - 948 62.5 47.1 77 22 1 12.9 51.6 78 - 130 X Leeds LX BY2E - TC)  130 X Leeds C5.0 48.8 77 22 1 12.9 51.6 78 - 130 X Leeds LX SYZE - TC)  14. X BY2E - TC)  15. X BYZE - TC)  16. X BYZE - TC)  17. X BYZE - TC)  18. X TWAA'S')  18. X TWAA'S') 19. X STWAA'S') 19. X STWAA'S') 19. X STWAA'S' 19. X STW	A B - 125	62.5	56.2	83	16	-	12.8	53.4	83	1	1	2
AK) 64.0 49.3 69 30 1 11.4 53.6 80 - 62.5 47.1 77 22 1 12.9 51.6 78 - 65.0 48.8 77 22 1 12.3 54.1 83 - (BYZE - 62.0 50.8 74 25 1 12.4 53.8 78 -  X W) 63.0 51.0 76 23 1 13.2 51.1 75 -  TC2) 64.0 52.6 83 16 1 13.0 52.3 82 - 65.0 44.8 65 34 1 11.1 53.6 75 -	о 1	0.49	42.9	63	36	 	12.2	52.3	68	37.7	9.5	က
AK) 65.0 48.8 77 22 1 12.9 51.6 78 -  AK) 61.0 58.8 79 20 1 12.3 54.1 83 -  (BYZE - 62.0 50.8 74 25 1 12.4 53.8 78 -  X W) 63.0 51.0 76 23 1 13.2 51.1 75 -  YTC2) 64.0 52.6 83 16 1 13.0 52.3 82 -  65.0 44.8 65 34 1 11.1 53.6 75 -	6W 5101	64.0	49.3	69	30		11.4	53.6	80	1	1	2
AK) 65.0 48.8 77 22 1 12.3 54.1 83  (BY2E - 62.0 56.8 79 20 1 12.3 53.0 78  (BYZE - 62.0 50.8 74 25 1 12.4 53.8 78  X W) 63.0 51.0 76 23 1 13.2 51.1 75  YTC2) 64.0 52.6 83 16 1 13.0 52.3 82  - 65.0 44.8 65 34 1 11.1 53.6 75	4W 5102 - 948	62.5	47.1	77	22	-	12.9	51.6	78	1	ı	
XW) 63.0 50.8 79 20 1 12.3 53.0 78 -  (BYZE - 62.0 50.8 74 25 1 12.4 53.8 78 -  XW) 63.0 51.0 76 23 1 13.2 51.1 75 -  TC2) 64.0 52.6 83 16 1 13.0 52.3 82 -  A'S' 63.5 50.0 73 25 2 11.4 53.6 70 -  65.0 44.8 65 34 1 11.1 53.6 75 -	1 - 130 X Leeds	65.0	48.8	77	22	Н	12.3	54.1	83	1	ì	2
(BY2E – 62.0 50.8 74 25 1 12.4 53.8 78 – 78 – 79.2 7.2 7.2 7.2 1 13.2 51.1 75 – 79.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7	BBAL X BYZE - TC) (DRICK X TMF - TC/LAK)	61.0	α α	79	20	-	10 3	53.0	Δ.	ı	ı	-
X W) 63.0 50.8 74 25 1 12.4 53.8 78 -  (TC2) 64.0 52.6 83 16 1 13.0 52.3 82 -  (A'S' 63.5 50.0 73 25 2 11.4 53.6 70 -  65.0 44.8 65 34 1 11.1 53.6 75 -	BYZE - TACE X TC4) (BYZE -		2	2	2	4		2.00	2	I	1	4
TC2) 64.0 52.6 83 16 1 13.0 52.3 82 -  AA'S' 63.5 50.0 73 25 2 11.4 53.6 70 -  65.0 44.8 65 34 1 11.1 53.6 75 -	TC X STW/AA'S')	62.0	50.8	74	25	-	12.4	53.8	78	ı	1	1
AA's' 64.0 52.6 83 16 1 13.0 52.3 82 - AA's' 63.5 50.0 73 25 2 11.4 53.6 70 - - 65.0 44.8 65 34 1 11.1 53.6 75 -	(BYZE - TC) 2 (Z - B X W)	63.0	51.0	92	23	-	13.2	51.1	75	ı	1	-
65.0 44.8 65 34 1 11.1 53.6 75 -	LAK) (B116E - TC")  AE - TC4 X STW 63/44'S'	64.0	52.6	83	16	10	13.0	52.3	82	1 (	3 (	7 -
65.0 44.8 65 34 1 11.1 53.6 75 -	. Dic. Vernum (TME -			2	3	1		0	2	1	ì	4
	TC2/Z - BXW)	65.0	8.44	65	34	-4	11.1	53.6	75	i	1	Н
1/ Unofficial												

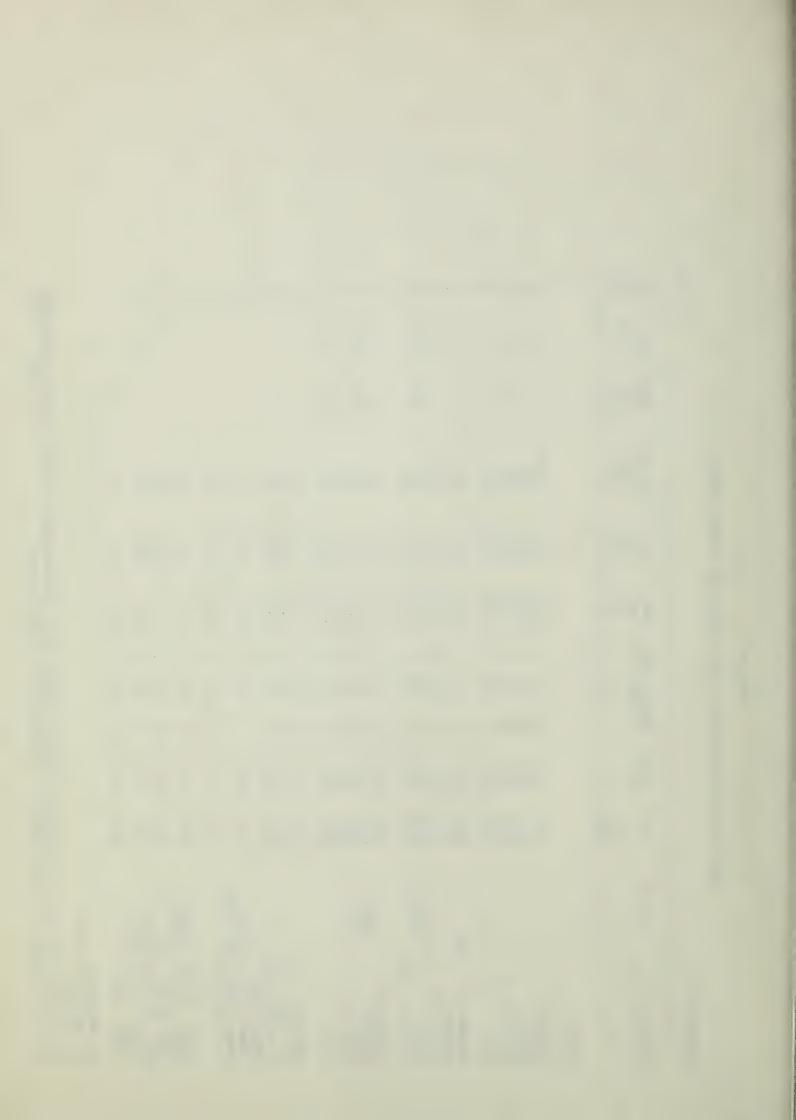


TABLE 11

QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

WASHINGTON

Variety or State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kernel Lg. Me	el Size Med. Sm.		Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
		#/Bu.	90	%	%	10%	%	%		%		
Ellensburg												
Leeds	13768	63.5	8.04	09		-1	14.9	49.5	06	35.0	10.0	4
Wandel1	15070	0.49	35.8	17		3	11.5	52.8	87	. 1	1	7
K6800707		65.0	45.4	57	42	<del>i i</del>	13.3	50.2	96	36.0	10.0	4
K6800719		64.5	45.8	77		7	13.6	49.5	89	37.0	9.0	en
M6800116		63.5	39.7	23	75	2	13.7	52.3	89	35.7	0.6	ო
M6800121		63.5	38.2	23	16		13.9	50.7	87	1	1	7
M6800127		64.0	41.7	51			14.3	50.0	94	34.3	10.0	4
M6800139		63.5	39.7	77		-	14.1	50.2	91	34.7	9.5	4
M6800143		0.49	37.2	31	89	-	13.7	49.3	91	34.7	0.6	က
M6800162		63.0	36.6	19	79	7	13.4	47.7	83	1	1	7
M6800198		63.0	39.1	41		Н	13.8	47.7	88	34.0	9.0	ന
NDD 06647		65.0	9.44	63		1	13.0	52.4	87	1	1	7
NDD 06659		64.5	45.7	29		-	13.3	51.6	. 87	1	í	7
NDD 66102		65.0	9.44	29	32	_	13.0	51.1	98	1	1	7
WA 005867		65.0	41.8	49		_	12.4	51.4	87	1	f	7
WA 005868		64.0	42.7	55	77		11.7	50.2	78	ı	1	H
WA 005869		64.5	45.2	70	29	-	13.0	51.6	98	ì	Ţ	2
1/ Unofficial 2/ 14% Moisture Basis	e Basis											
•	rurified Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise.	acceptable e Promise	e, norma	lly; hone	owever,	due to	to the exce	excellentise.	t color this c	rop year	, the minimum score is 88.	ıfmum 88.
											1	

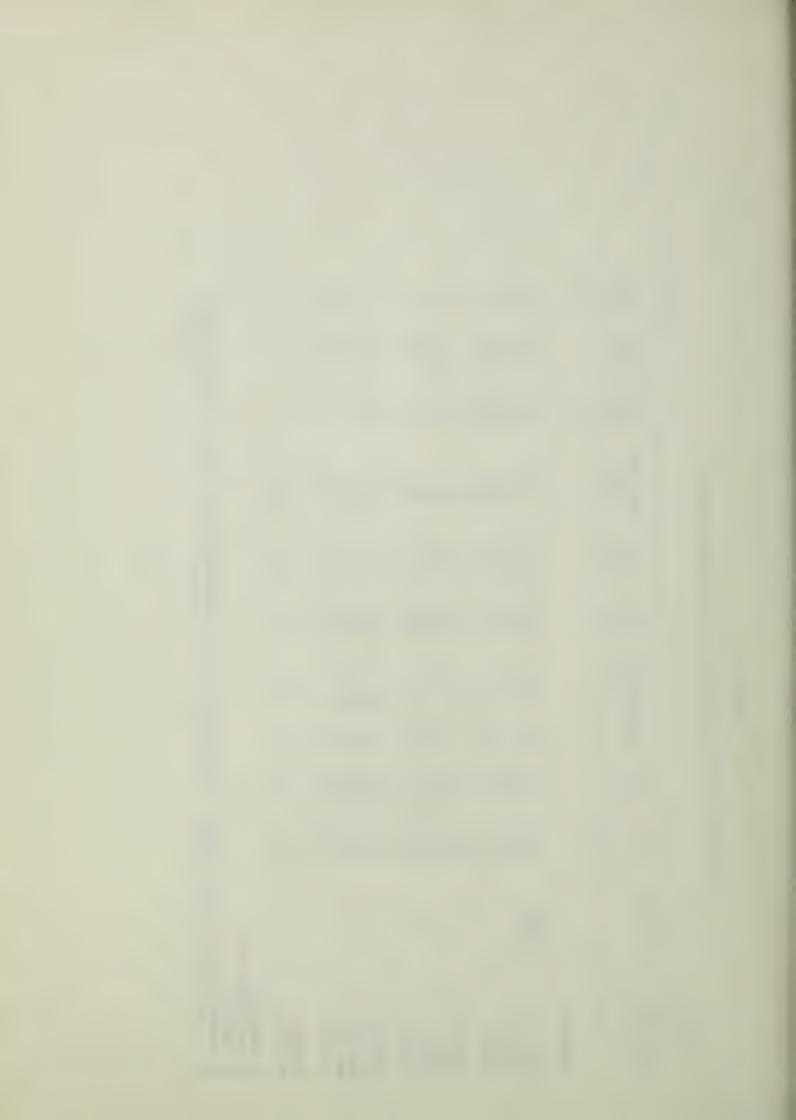


TABLE 12

## QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

WASHINGTON

Royal Slope Leeds Leeds Wandell K6800707 K6800718 K6800719 K6800719 K6800116 K6800116 K6800111 K680012	44.6 37.2 37.2 45.0 47.8 50.2 42.2 42.0	%		/7	3/	14	/7		Eval. $\frac{5}{}$
13768			% %	%	%		8		
13768 15070									
15070		73	26 1	14.1	53.9	91	35.3	10.0	4
		35	62 3	12.2	54.6	90	37.0	10.0	4
		73		13.4	54.6	95	34.3	10.0	4
		75.	24 1	12.0	53.9	85	1	1	7
		79		13.4	51.6	87	1	-1	7
		58	41 1	13.6	52.1	82	ı	1	2
		57		12.8	54.8	87	. 1	ı	8
M6800127 64.0		7.1	28 1	13.8	53.0	68	33.7	10.0	4
M6800139 64.2		63		13.3	53.2	80	ı	1	7
M6800140 64.2		99		13.2	53.2	85	i	1	7
M6800143 64.5		09	39 1	13.1	53.2	86	ı	1	2
M6800162 63.5		30	69 1	13.5	50.9	82	1	ı	7
M6800198 64.0		58	41 1	13.1	52.8	85	1	1	?
NDD 06647 65.0	8.64 0	78	21 1	12.1	53.7	83	i	1	2
NDD 06659 64.0		77	22 1	12.3	53.2	86	1	3	7
NDD 06660 64.0	53.5	79	20 1	12.1	53.9	87	ı	1	2
NDD 66102 63.0		77	22 1	12.8	52.5	87	1	1	2
WA 005867 64.0	0 45.5	9/	23 1	12.3	53.0	88	35.7	9.0	ന
WA 005869 64.5		77	22 1	12.2	53.2	85	1	i.	7
/ Unofficial / 14% Moisture Basis / Purified									
4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum	able, normally; however,	lly; how	ever, du	due to the exce	excellent	t color this c	rop year,	the minimum	mim

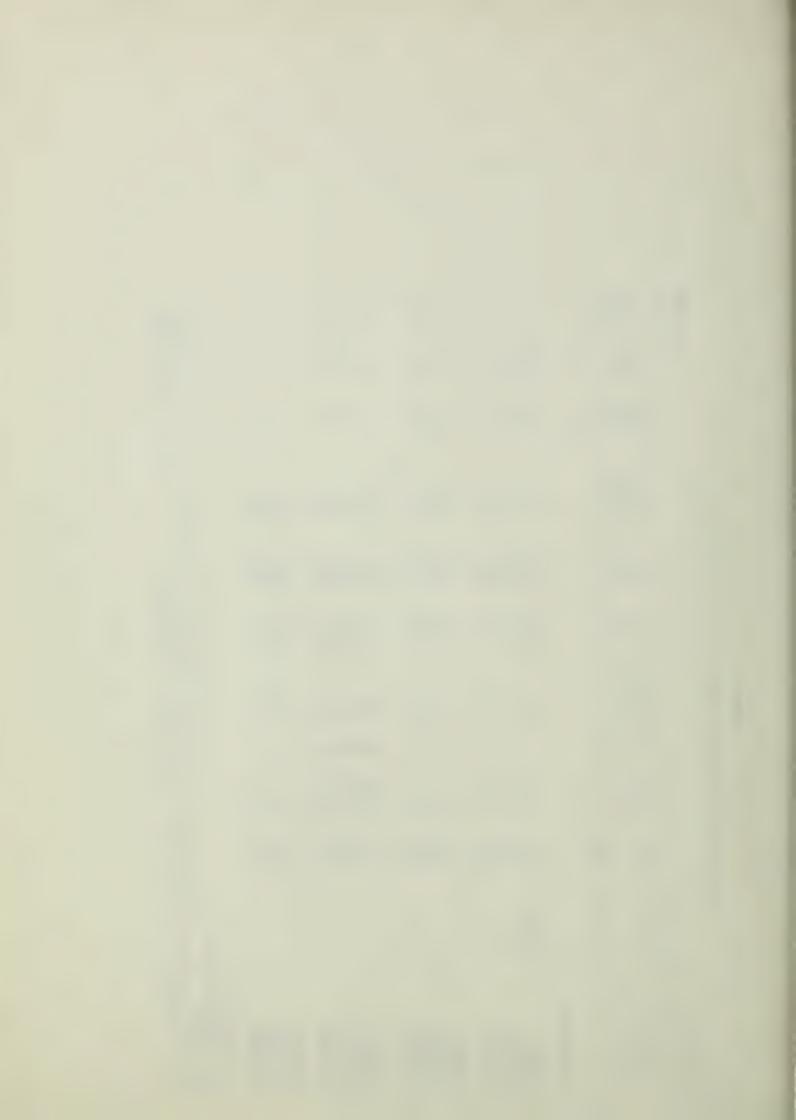


TABLE 13

QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

WASHINGTON											197	1971 CROP
Variety or State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kerne Lg.	Kernel Size Lg. Med. Sm.		Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs. $\frac{2}{2}$	Vis. Color	Gen. Eval.
		#/Bu.	60	%	%	%	%	%		%		
Royal Slope												
Wandell	15070	64.0	39.8	47			0.3	54.0	80 (	37.7	9.5	en :
MD 000104		63.0 65.5	49.5 52.4	72			3.6 1.6	50 <b>.9</b> 52 <b>.6</b>	78	F 1	1 1	
MD 000108 MD 000117		66.0	56.8	79	20 14		11.4	51.9 51.4	78 79	1 1	1 1	
MD 000132		64.5	53.8	75			2.2	51.4	82	1	ı	2
MD 000134		63.0	54.3	79			1.8	51.9	79	ı	3	-
MD 000135		0.49	61.0	89			2.2	51.2	79	ı	ı	
NDD 64056 (#16)		63.0	53.5 48.1	63	35	2 2	10.5 12.7	52.8 53.2	79 84	1 1	1 1	7 7
NDD 64056 (#24)		64.5	53.2	83			2.4	53.7	78	,	ı	<del></del> 1
_		62.0	6.94	71			1.9	51.9	85		1	2
68079		64.0	43.7	99			2.0	52.1	80	1	ì	2
NDD 64107 (#18) NDD 64107 (#26)		63.5	43.3	63	30	77	12.2 11.9	50.7 53.5	85 93	38.0	10.0	7 4
NDD 64111		62.5	51.3	79			2.8	53.5	84	1	1	2
64127		0.99	52.9	78			1.3	53.5	88	34.7	9.5	ന
NDD 64127 (#27)		65.0	43.1	67			1.8	52.3	82	1	1	~ ~
		62.5	48.3	27	26	3 -	12.8	52.5	79	1 1		7 [
65015		63.0	50.2	80			3.0	50.5	92	37.3	0.6	m i
NDD 65015 (#22)		62.5	50.8	5 t			7.7	52.8	/0 75_8	1 1	<b>i</b> 1	
		63.0	51.5	89	29	10	11.2	51.4	80	ı <b>ı</b>	l i	7 7
NDD 65205		63.8	52.1	81			2.0	52.1	78		1	н

(CONT'D.)

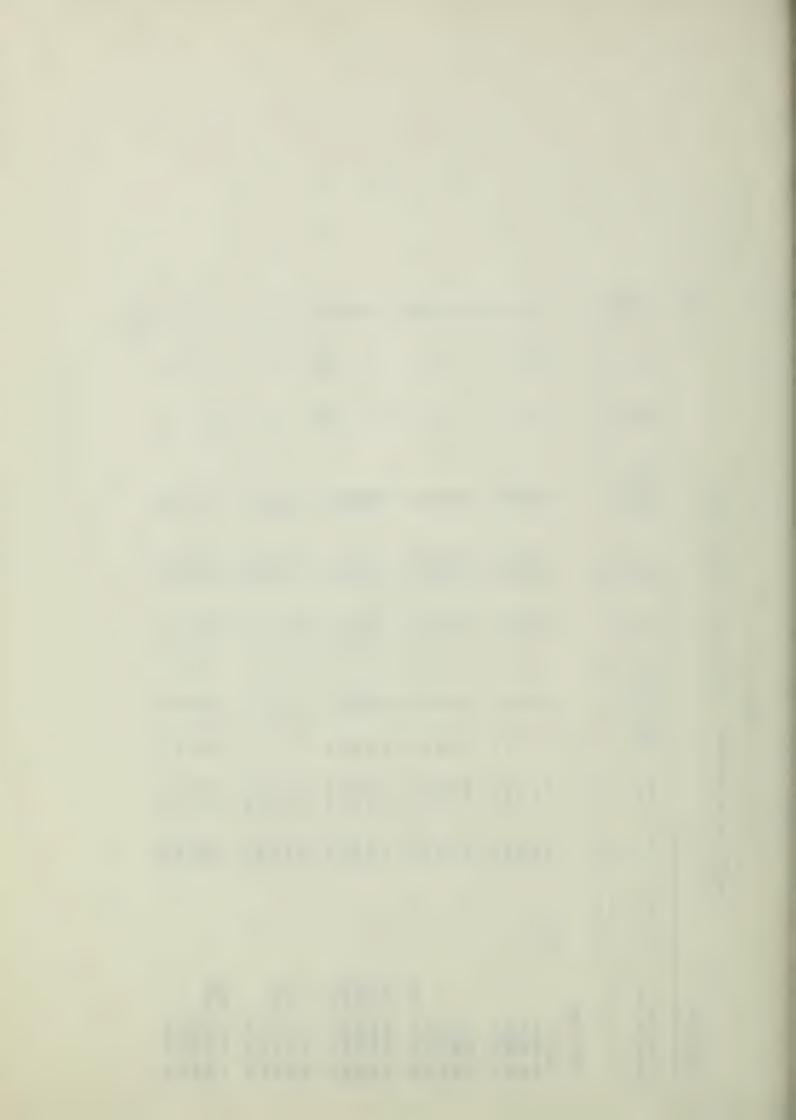
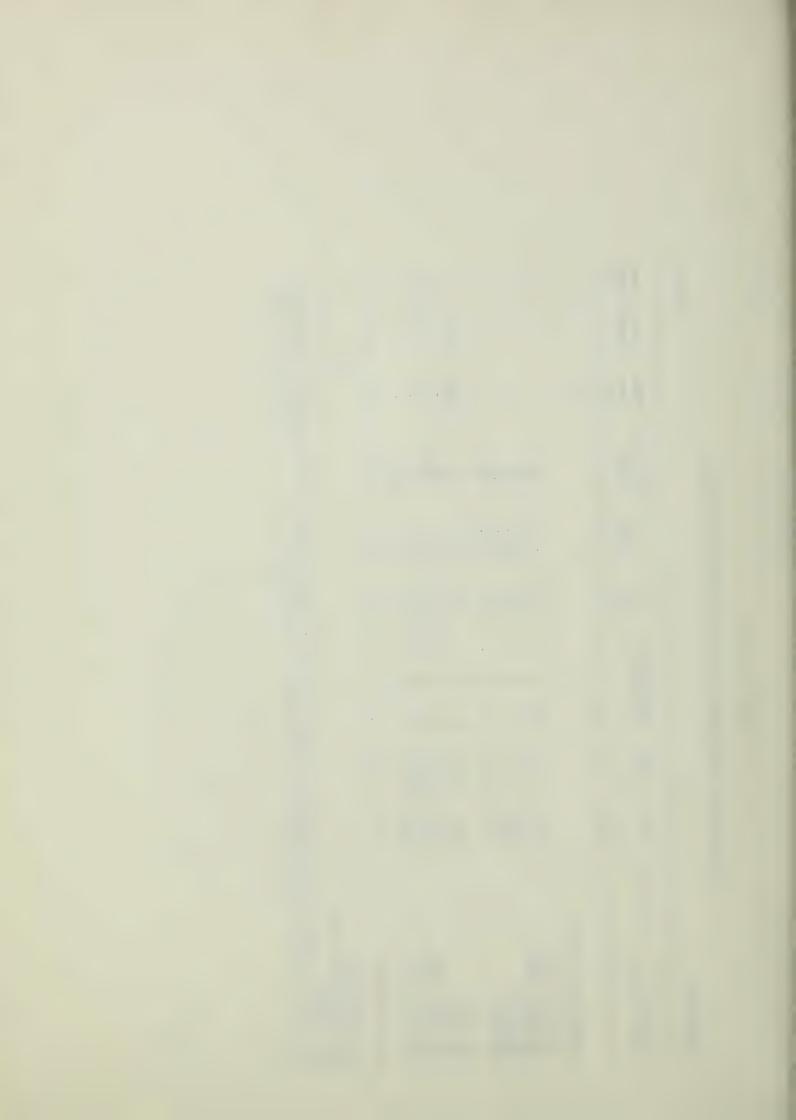


TABLE 13 (Cont'd.)

# QUALITY DATA ON PRELIMINARY YIELD DURUM WHEAT NURSERY SAMPLES

WASHINGTON

-														
Vari	Variety or State Sel. No.		C.I. No.	). T.W.	1000 Kwt.	Kern Lg.	Kernel Size Lg. Med. Sm.	Sm.	Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
				#/Bu.	00	%	200	%	%	%		%		
Roya	Royal Slope (Cont'd.)	(Cont'd												
NDD	NDD 66151 (#32)	32)		64.0		99	32	7	11.3	51.9	85	ı	1	2
NDD	NDD 66151 (#38)	38)		65.0	48.3	72	27	-	10.7	52.8	79	ı	ı	Н
NDD	66157			0.49		81	18	7	11.6	51.2	84	ı	ı	2
NDD	66159			65.0		79	20	7	11.6	52.6	83	i	ı	2
NDD	66200			63.0		74	25		11.7	54.4	78	1	i .	-
NDD	NDD 66235			64.5		82	17	Н	11.8	49.8	91	38.0	10.0	4
NDD	66295			64.5		69	30	-	12.3	51.9	79	1	1	
NDD	66255	(#42)		63.0		91	6	0	13.3	51.9	79-R	<b>I</b>	ŧ	-1
NDD	66255	(#43)		0.49	56.5	79	20		11.3	53.7	78	ı	1	н
NDD	67201 (#3	52)		62.0		11	22	Н	12.3	52.1	82	1	ı	2
MDD	NDD 67201 (#53)	53)		64.5	47.8	79	20	<b>H</b>	12.5	53.2	<b>∞</b>	37.3	0.6	ო
।र्याद्वाथान	Unofficial 14% Moisture Basis Purified Below 80 color scoil 1 - No Promise, 2	al ture Ba: color :	sis score r 2 - Li	Inofficial 14% Moisture Basis Purified Below 80 color score not acceptable, normally; however, due to the exce 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise.	ble, norn se, 3 - S	ally; }	nowever	; due	to the e	xcellent se.	Unofficial 14% Moisture Basis Purified Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise.	crop year, tl score is 88.	the minimum 8. R - Red.	imum Red.



QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

CALIFORNIA

Variety or C.1. No. State Sel. No.	T.W.	1000 Kwt.	Kern Lg.	Kernel Size Lg. Med. Sm.	Sm.	Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
	±/Bu.	90	%	%	%	71 %	તો <u>%</u>	) <del> </del>	/1 %		75
El Centro											
Albatross	64.5	58.8	83	16		13,4	54.8	70	,	ı	-
Anhinga "S"	65.0	50.2	- 29	30	3	13,5	51,6	65	,1		-4
	63.0	48,3	71	23	9	12.6	50.8	. 09	•	<b>1</b>	<del>,</del> 4
Brant "S"	62.0	50.0	29	30	·m	12,8	49.5	09	1	,	
	63.0	47.6	59	40	-	12.7	48.4	70 70	•	,	<del></del>
	62.5	44.8	51	94	m	12.7	49.2	70		1	prof
D7064 Date I	63.5	48.3	63	36	-4	12,4	51.6	0/	1	1	ŗ
D7064 Date II	0.49	57.1	98	13	-	12,3	52.2	70	4	1	<b></b> 4
D7064 Date III	63.5	54.9	83	16		10.3	52.2	70	•	•	
	63.5	46.5	89	31		12.2	47.8	09	•	1	prof.
D7066 Advanced	0.49	54.0	85	14		11,3	48.7	. 09		•	-4
D7070	64.5	48.3	26	73	gard.	12.9	48.6	70	1	1	-4
	64.5	53.2	83	16	i-a	12,7	50.8	09	4	ı	-4
	63.5	39.4	33	99	m	11.5	50.5	65	•	•	7
	62.5	52.4	85	14		11.9	50.5	85	,	1	2
Unofficial 14% Moisture Basis Purified Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum	cceptab1	e, norma	11y; h	lowevel	r, due	due to the exce	excellen	t color this c	rop year	the mir	1.mum

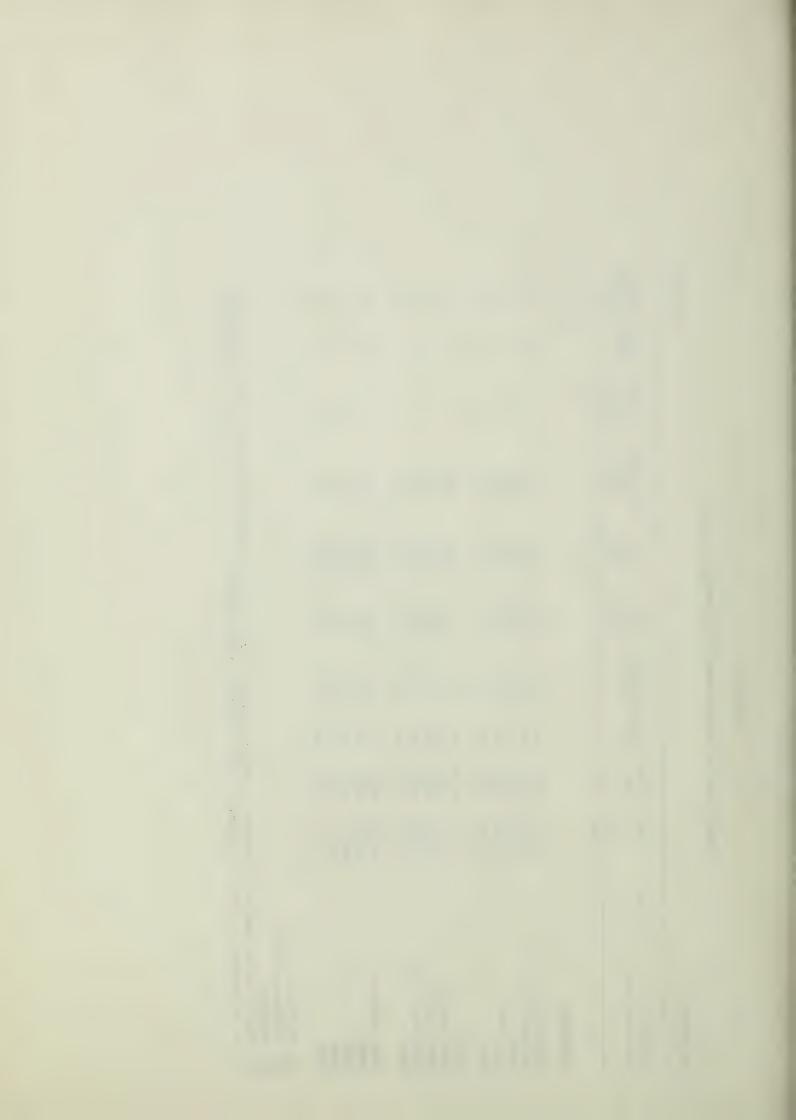


TABLE 15

QUALITY DATA ON SPECIAL GENOTYPE ENVIRONMENTAL

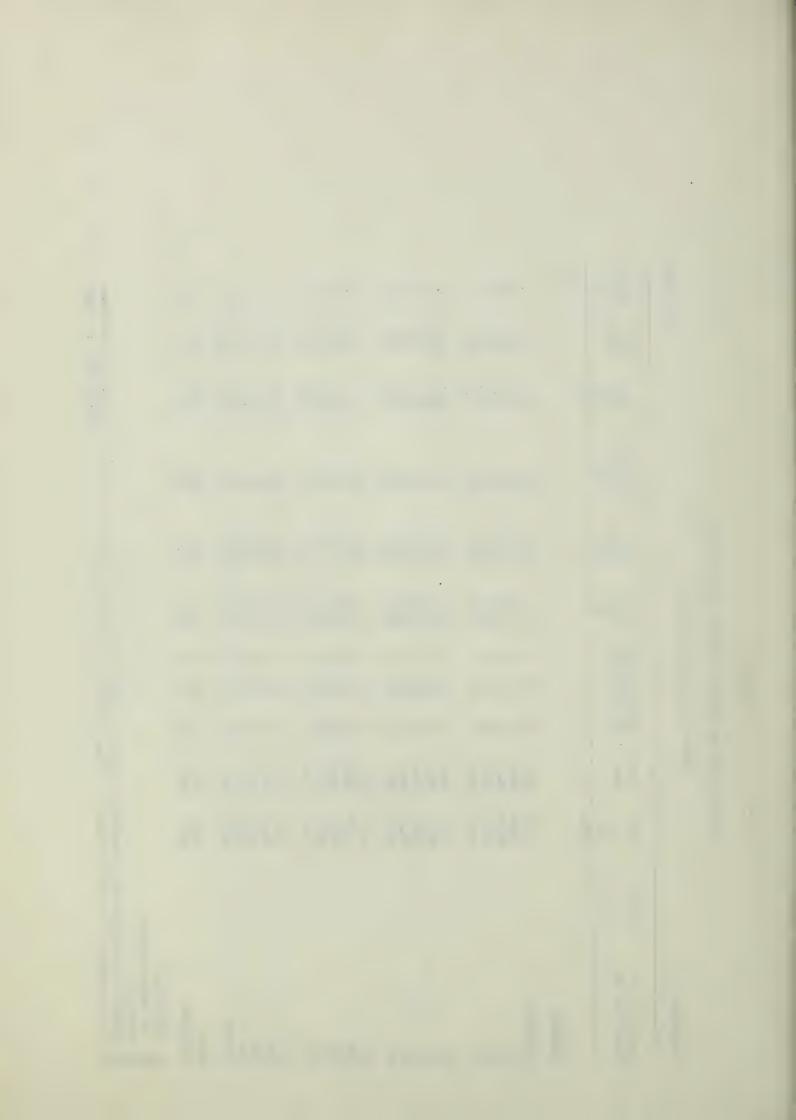
CALIFORNIA			DURUM	1 WHEAT	DURUM WHEAT NURSERY SAMPLES	RY SA	MPLES				197	1971 CROP
Variety or State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kernel Lg. M	Med. Sm.	صا <b>ي</b>	Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval. 5/
		#/Bu.	800	%	%	%	%	%		%		
Tulelake												
Sentry-1		62.0	49.3	70	28	2	14.4	47.7	89	34.0	0.6	c
2		59.0	48.1	72	56	2	11.8	9.97	88	37.0	8.5	m
15		63.0	44.2	62	36	2 0	12.9	46.4	95	36.0		4 -
16		62.0	42.4	56	42	2 -	12,4	48.4	95	35.7	10.0	<b>4</b> •
24		61.0	35.2	31	65	4	13.4	48.4	101	35,3	10.0	4
26		61.0	39.7	64	64	2	13,2	8.64	95	35,3	10.0	4
31		0.09	39,1	40	58	2	12,4	9*94	86	35,3	0.6	4
34		62.5	41.2	55	77		12,4	48.2	92	37.7	0°6	က
42		62.5	43,3	22	42		12,8	52.0	06	37.7	0°6	က
77		61.0	42.7	9	35		12.7	47.9	92	36.0	0°6	က
83		0.09	43.5	59	40		11.7	48.2	83	ı	1	2
100		0.09	38.8	47	84	2	12.6	47.3	91	34.7	8,5	က
124		62.0	36.4	37	29	4	12.0	8.64	93-R	33,3	9.5	က
133		62.5	43.1	79	35		13.2	47.5	89	34.0	0.6	က
137		60.5	41.8	64	67	7	12.7	6.74	91	34.7	9.5	က
148	٠.	61.5	38.0	39	59		12,1	46.1	96	35.0	9.5	4
149		59.0	30°5	6	98	rJ.	11.9	46.3	100	34.7	9.5	7
156		60.5	33.9	25	71	. 7	12.4	48.2	93	35.7	0°6	m
158		60.5	37.5	23	72	5	11.8	49.8	88	35.0	0.6	က
70-168		62.5	45.9	777	53	m	12.0	48.4	95	35.7	10.0	4
70-85		62.0	46.7	20	28	2	12.7	50.2	90	35.7	9.0	က
Sentry-80		60.5	45.9	22	14	2	14.0	20.0	986	•	•	2

14% Moisture Basis

नाजालाकाजा

Unofficial

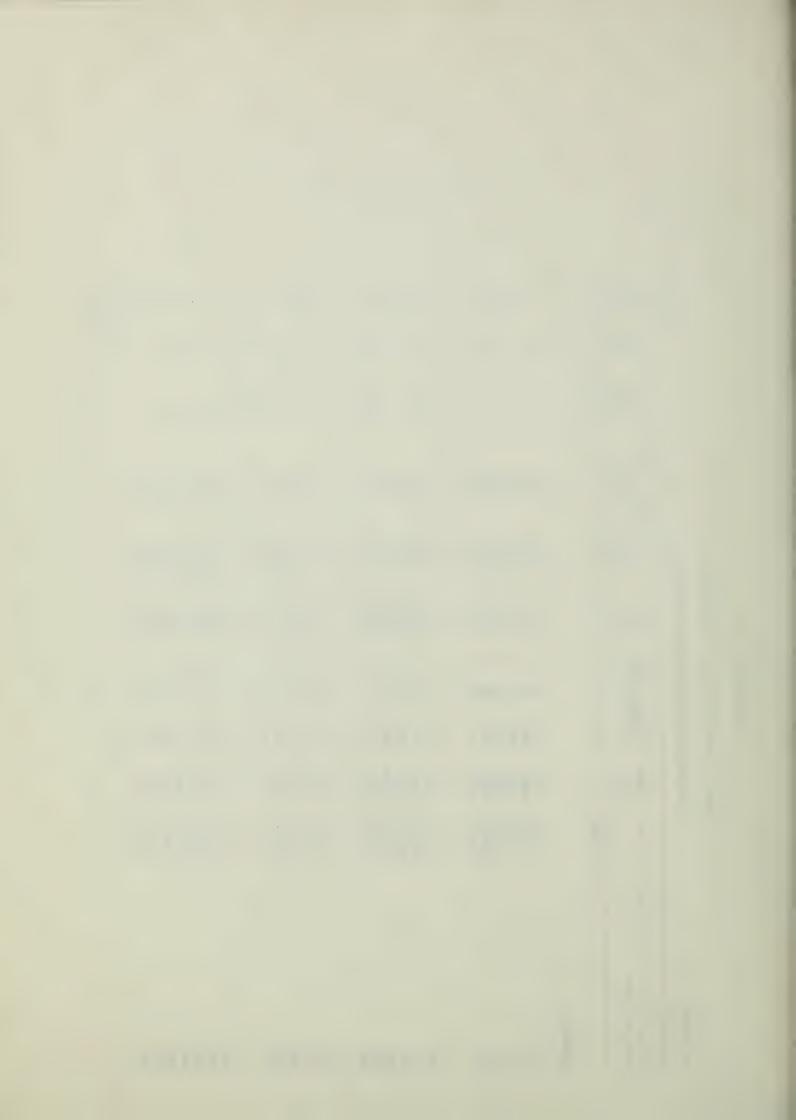
Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise. Purified



QUALITY DATA ON SPECIAL TULELAKE FIELD

CALIFORNIA		01	STATION	OURUM 1	VHEAT	NURSEI	STATION DURUM WHEAT NURSERY SAMPLES	SE			197	1971 CROP	
Variety or State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kerne Lg.	Kernel Size Lg. Med. Sm.	Sm.	Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.	
		#/Bu.	60	%	600	%	71 %	71 8	71	71 80		71	
Tulelake													
9		0.49	51.5	62	20	1	12,3	53.3	81	•	,	2	
20		0.49	45.7	89	30	2	13,3	51.8	80	•		7	
25		63.0	51.0	82	16	2	13.5	48.6	82	•		2	
29		63.0	50.5	78	20	2	12.9	50.2	84			7	
36		63.0	48.1	20	28	2.	12.0	50.9	80	,	•	2	
21		62.5	47.8	1/4	24	2	12.4	49.5	80			2	
77		63.5	44.4	65	33	2	12,5	49.8	84		,	2	
45		63.0	49.5	74	24	2	12.6	51.4	81	•	1	2	
63		63.5	52.6	83	16	-	14.0	48.6	82		1	2	
100		63.0	42.8	58	40	2	12.3	49.3	86	,	•	2	
108		62.5	47.1	20	27	ന	13.8	51,1	88	33.7	9.5	4	
109		62.0	43.7	65	34	<del></del> 1	12.9	48.4	81	•	•	2	
115		. 62.5	55.6	78	19	9	13.6	48.4	79		ı	-	
143		61.5	52.4	78	20	2	13,8	47.5	80	1		2	
152		63.5	55.2	81	18	,i	12.6	46.8	84	1	ı	2	
150		62.0	54.6	98	13		14.6	47.7			1		
134		57.5	46.5	72	56	2	12.6	42.7	78	•	•	-	
166		63,5	52.6	75	23	2	13.0	48.8	75	•	•	-	
174		63.0	52.6	9/	22	2	13.0	49,3	20		•		
178		63.0	52.4	78	20	2	13.7	49.3	75	٠	•	1	
189		63.5	46.7	89	30	7	12.6	48.9	. 92	•	•		
195		63.0	8.84	29	30	က	12.5	8.64	83	•	•	2	
211		62.5	52.6	82	17	-	13.0	8.64	92	•	•	<b>,</b> 4	
181		0.09	48,1	75	24	-	11.1	44.7	74	•			

(cont'D.)



QUALITY DATA ON SPECIAL TULELAKE FIELD

CALIFORNIA		STATION	DURUM 1	WHEAT 1	NURSE	STATION DURUM WHEAT NURSERY SAMPLES	SE			197	1971 CROP
Variety or C.I. No. State Sel. No.	T.W.	1000 Kwt.	Kern Lg.	Kernel Size Lg. Med. Sm.	Sim.	Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
	#/Bu.	80	%	%	%	%	%		%		
Tulelake (Cont'd.)											
557	62.5	55.2	82	16	7	14.2	48.9	93	34.0	0.6	m (
568	63.0	50.2	19	3/	7 0	12./	47.7	φ α	י ני גנ	, u	7
598	62.2	52.4	08	18	2 2	15,3	48.6	0 80 0 80	35.0	0.0	1 4
591	29.0	46.1	74	24	7	12.5	47.2	87	i	ı	5
220	62.0	43.3	70	28	2	13.7	48.6	85	,	1	2
223	62.0	47.8	80	18	2	15.4	49.1	98		•	2
234	63.0	6.94	73	26	<b></b> (	13.0	47.9	78			<b>⊶</b> (
243	62.5	48.3	78	20	7 -	14.5	48.2	080		• (	2 5
247	63.5	0.00	75	23	٦	13.4	7.04	91	36.0	י מ	۷ <
238	63.0	48.3	12	21	5	13.8	46.3	77	)   	<u>;</u> ,	<b>,</b> –
281	63.5	4.7.4	9/	23	-	13.9	49.1	85		•	2
310	63.5	45.2	89	31	<b>.</b>	14.0	50.0	. 82	ì	1	7
312	63.0	51.5	84 74 74	15	- ~	15.3	50.5	ω 27	• 1	, ,	2 5
325	63.2	48.5	82	16	2 2	15.1	48.9	\$ 75 80		•	1 %
298	62.0	47.6	79	119	5	13.1	46.1	82		•	7
363	62.5	49.0	78	20	2	15.2	50.2	75		•	
371	63.0	55.2	79	19	2	13.6	50.7	84	•		2
333	61.0	9.44	99	32	2	13.7	47.7	70	•	•	
395	63.0	55.2	79	19	2	13.4	50.2	83	1	,	6
409	65.0	55.2	88	11	,	14.6	48.9	. 88		•	5 1
411	61.5	54.0	85	14		12.5	47.2	84	•	•	2
427	63.0	53.5	78	20	7 -	13,4	50.0	82		•	~ ~
) 1	0.50	47.0	9	2	<b>-</b>	17.1	49.3	10	•	•	7

(cont'D.)

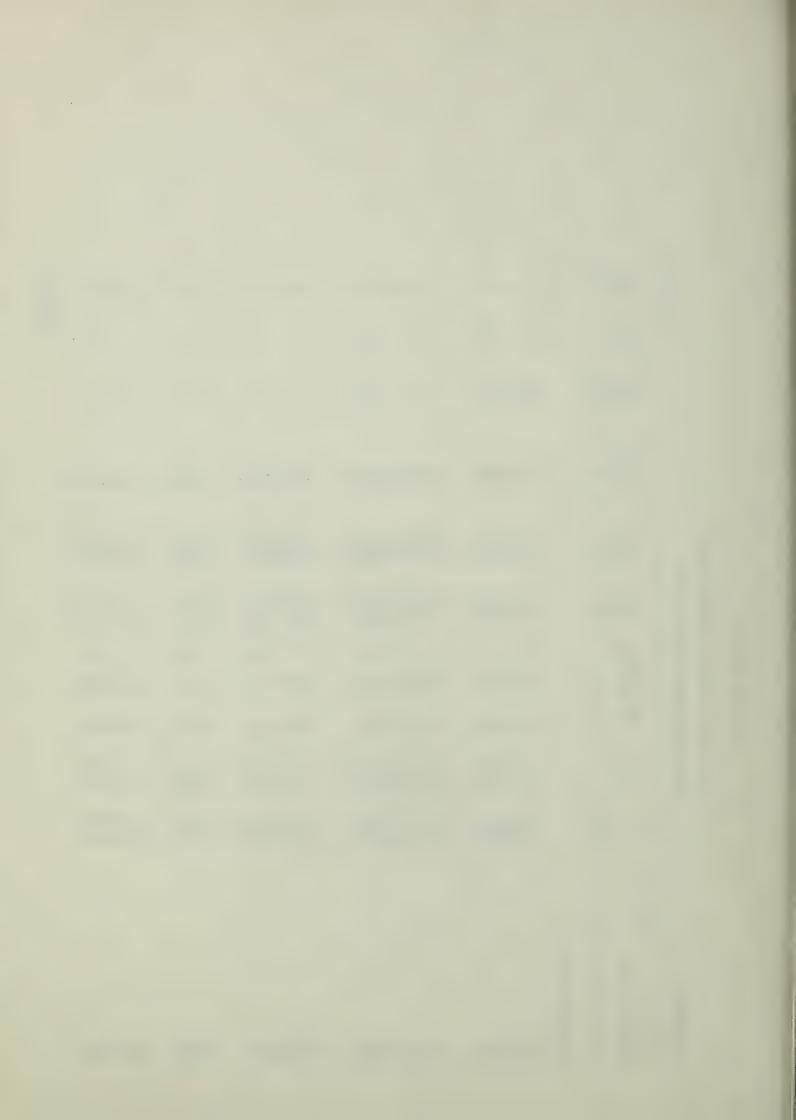


TABLE 16 (Cont'd.)

QUALITY DATA ON SPECIAL TULELAKE FIELD

CALIFORNIA	·	• .	STATION DURUM WHEAT NURSERY SAMPLES	OURUM 1	инеат	NURSE	RY SAMPI	ES			19.	1971 CROP
Variety or State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kerne Lg.	Kernel Size Lg. Med. Sm.	Sm.	Wht. Pro. 2/	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
Tulelake (Cont'd.)		#/Bu.	ಹಿ	50	%	5°2	<b>5</b> %	%		%		
717		62.5	7.97	74	23	٠	12.9	52.9	78	,		c
493		62.5	46.7	72	24	, 4	14.0	49.8	75		1 1	<b>4</b>
867		63.0	47.8	70	28	2	13,3	51,1	80		•	5
517		63.5	47.1	79	20	-	14.1	48.6	86	'	•	2
542		63,5	48.5	62	19	2	12,9	50.7	89	35.0	0°6	<b>с</b>
531		62.0	38.6	20	48	2	10.9	50.0	80	ı	,	2
445	•	61.0	35.2	33	63	4	11.2	51.1	. 78	. 1	1	7
Leeds 111		65.0	43.9	63	35	2	11.4	52.5	90	34.3	9.5	4
Leeds 112		0*29	45.9	62	36	7	11,3	53.0	06	34.3	10.0	4
<pre>1/ Unofficial 2/ 14% moisture basis 3/ Purified 4/ Below 80 color score not acceptable, normally; however, 5/ 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4</pre>	basis or score not e, 2 - Littl	acceptabl Le Promise	e, norma	11y; h	owever nise,	due 4 - G	due to the exce - Good Promise.	excellen ise.	Unofficial 14% moisture basis Purified Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise,	rop year,	the minimum score is 88.	ilmum 188.

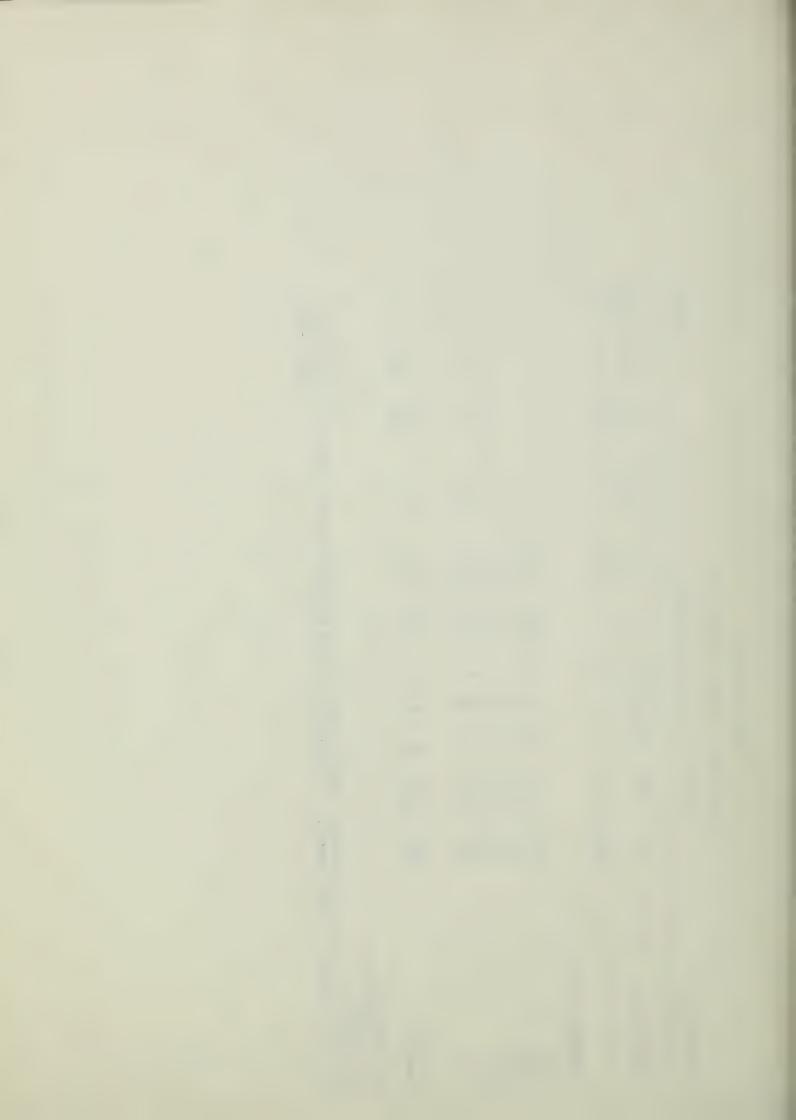


TABLE 17

QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

WASHINGTON		·		· h	PI LINE	[-]					1971	1971 CROP
Variety or State Sel, No.	C.I. No.	T.W.	1000 Kwt.	Kernel Lg. Me	el Size Med. Sm.	om se	Wht. Pro. 2/	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
		#/Bu.	ى 0	%	%	%	%	%		%		
Pullman												
Arnaud De Studina		62.0	56.5	81	17	2	11.7	54.4	80	35.3	8.5	2
		63.0	52,1	83	16		13,6	49.3	09		٠	7
		0.49	51.3	81	18		12,4	52.1	09	•		<b>-</b>
PI 165116-6 PI 165143		62.0	64.5	882	16	. 2	12.5	52.5	70	1 1.		, ;
				) )	) 	1		•	3			4
PI 165152-3		62.5	61.0	88	10	2	11.7	53:7	75	į	1	7
		62.0	61.3	88	10	2	12,4	53.9	7.5		•	-1
		61.0	56.5	82	16	2	12.4	53.7	80	36.0	0.6	က
		63.0	62.5	85	13	2	11.8	53.7	80	1	1	2
PI 165206-2		63.0	0.89	89	6	2	12.8	54.4	80	35.7	9.5	3
PI 165206-4		62.0	9.99	87	11	2	12,3	52.8	78	1	,	-
		62.0	6 69	06	0	·	13.0	51.6	7.5	,	,	۰-
		63.5	62.5	95	, _		14.1	48.8	75		•	4
PI 165217-4		62.5	63.7	84	14		12.2	52,8	70	,	,	-
PI 165222-1		62.0	68.0	98	12	2	12.6	54.6	. 75	1	,	-4
PI 166226-3		63.0	61,7	80	10		13.0	50.7	75	,	•	-
		63,5	9.09	. 98	12	7	12.0	52.8	85	•	1	2
PI 166327		62.0	61.7	90	6		14.1	50.9	70		•	
166330		63.0	52.1	85	13		13.6	51.2	70	,	1.	-
PI 166349-2		0.19	65.8	88	10		13,5	50.9	75	1	1.	<b></b> 1
PI 166444-2		64.0	56.5	83	16	,1	12.8	49.8	75	36.7	7.5	1
		62.0	52,6	79	20	-4	13.0	50.9	75	1	•	·
		63.0	54.6	80	18	2	13,5	52.9	75	38.0	8,5	2
		0.49	51.5	9/	22		13.5	46.3	75	•		-
PI 166470		ė'	50.8		•		13,1	48.3	75			
PI 166485-4		62.0	55.2	82	16	2	12.2	46.0	85	37.7	8.17	2
		63.0	54.3	75	22	က	12.8	47.5	80		•	2
		62.5	53.2	82	16	2	12.7	53.2	70		•	
		62.5	51.0	79	19	2	13.6	52.3	75	•	•	1
PI 166528		61.5	56.5	84	15		14.4	52.0	75	36.7	8,5	1

(CONT'D.)

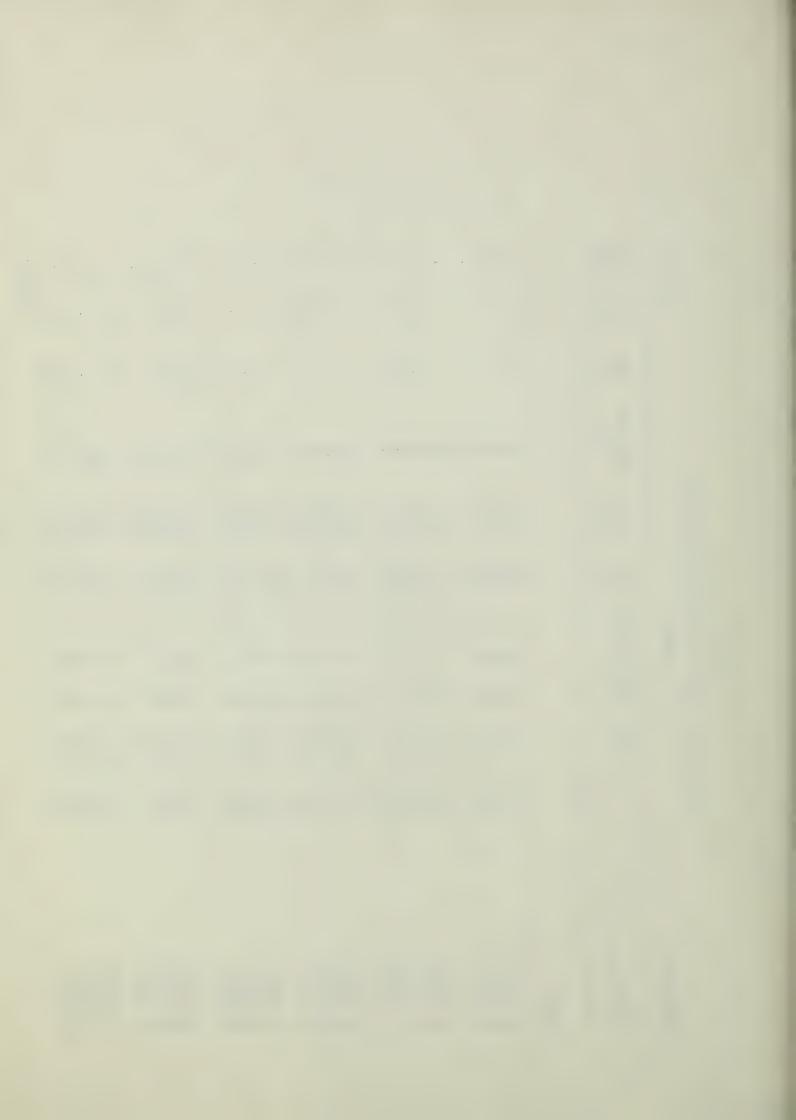


TABLE 17 (Cont'd.)

QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

Variety or C.1. No. State Sel. No.		1000	Vound	1 0420	2	T.Th. 4	D	Direct Collect	2	17.2	-
	<u>1</u>	Kwt.	Lg.	p,	Sm.	Pro.	Semo.	Score 4/	Abs.	Color	Eva 1, 5/
	#/Bu.	00	%	%	%	%	%		%		
Pullman (Cont'd.)											
PI 166681-1	61.5	64.5	87	12	-	14.3	51.1	80	36.3	5.5	2
	0.09	65.4	83	15	2 -	12.7	53.6	20	) ) )	1	
	60,5	62.9	80	17	m	12.9	54.8	08	1	•	2
	61,0	65.4	85	13	2	13,2	54.1	75	,	-1	-
	0.09	62.5	98	12	2	13.0	53.9	75		ŧ	-
PI 182899-3	61.0	54.3	98	6	2	12.8	53.6	78		ı	
PI 211671-1	60.5	62,1	84	15		13.3	51.6	80	1	ı	2
PI 221492-1	60.5	74.6	85	13	2	13.2	54.1	80	37.0	8.5	2
PI 221492-2	0.09	81.3	98	13	-	13,3	53.9	80	,		7
	60.5	75.2	87	12		13.5	53.4	80	,	ì	7
PT 245585-2	5 09	63.7	84	13	er er	13.0	54. 9	80	•	ļ	6
		7	0 0	2 5	) (	13.6	1 0	8 8			1 0
	0.09	67.6	0 00	10	7 6	13.0	53.4	Q &			10
	61.0	68.0	98	13		15.0	53.9	80	,	,1	0
	61.0	63,3	85	13	2	15.2	54.1	8 8	36.7	8.5	7
	60.5	64.9	83	16	<del></del>	15.0	53.4	82	37.0	8.5	7
	60.5	63.3	83	15	7	15.9	53.2	08	36.7	8.5	2 0
	0.19	67.9	\$ 5	<b>1</b>	٦,	15.2	53.9	08	• !	•	7
	61.0	63.7	82	16	5	15.6	54.8	85	37.0	8,5	7
PI 245651-3	61.0	6.49	88	10		15.2	54.8	82	37.0	8.5	7
PI 245651-4	61.5	66.7	88	11		15.1	55,3	85	,	,	7
	62.5	61.7	06	6	إنسو ا	13.9	53.0	78	39.0	7.5	
	61.0	56.8	84	15	-	15.0	52.3	70		,	إنسي ا
	61.0	54.6	82	17	-	15.3	52.8	70	•	•	اجت
	57.5	68.5	70	29	ı	12.9	54.6	20	,		
	57.5	62.9	29	31	7	12.4	54.8	70	,	•	
/ Unofficial											
2/ 14% Moisture Basis											

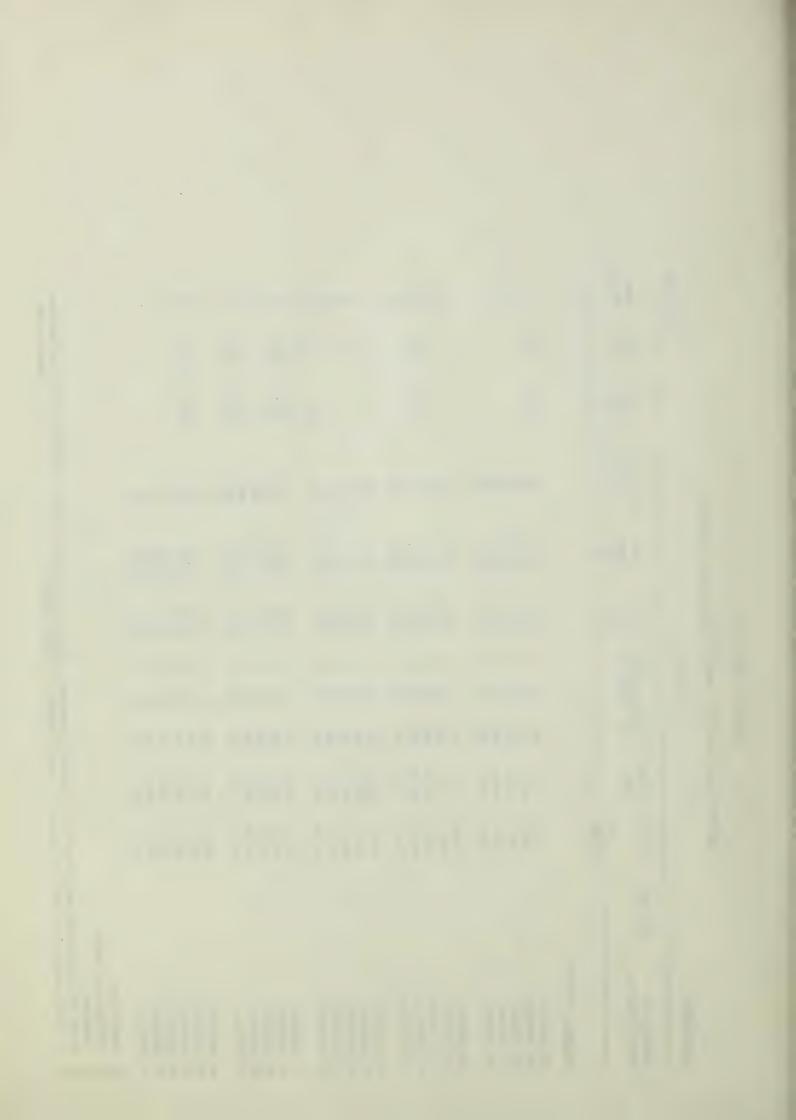


TABLE 18
QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

1971 CROP	Gen. Eval. 5/			2	က	<del></del> 4	<del></del> 1	7	2	2	2	7	က	c	o <	† ~	2	5 2	2	2	7	٦ ,	4	m	7 0	7 0	7 4	٣	14	4	7 7
197	Vis. Color			1	<b>1</b>			,	,	1		•	9.5		10.01	9.5	1	•	1 ·	•	ı	• 1	•	•	•	ı	10.0		10.0	10.0	<b>.</b> •
	Semo. Abs.	%				,	•	1	,			,	34.7	7 72	37.7	34.7		•	,		ı	• 1	ŀ	•		•	33.7	1	37.0	33,3	1 1
	Dust Color Score			85	87	.75	75	85	85	. 08	85	85	89	0	00	o «	25.0	82	85	82	83	80 00	6	86	85	£ 6	06	87	606	06	80
:	Pur. Semo.	%		51.4	52.5	50.9	50.0	49.8	50.0	50.5	51.1	53.2	55.0	700	7.07 7.07	2.0.5	23.0	52.7	52.7	53.6	51.8	50.9	74.3	52.5	53.2	53.2	52.0	α	53.2	53.4	52.3
SPECIAL DURUM MUTANT SERIES	Wht. Pro.	%		13.0	11.9	13.5	13.9	13,1	13.3	13,5	13,4	12.4	12.6	13 61	17, 3	14.2	12.3	12.5	12.9	12,4	13.1	14.1	13.3	12.6	12.4	12.2	13.2	12.1	13.9	12.5	14.2
KUM MUTAN	Kernel Size Lg. Med. Sm.	% %					42 1		56 1	37 1		46 1	744	1 00	25 . 1	30 1		34 1	38 1	40 1	44 1	38 1		52 1	54 1		71 1 39 1		49 3		30 1
CLAL DUF	Kerne Lg.	%		43	35	28	57	27	43	62	51	53	55	. 13	7,7	7 69	. 15	65	61	59	55	61	c o		45	37	97	63	0 4	37	69
SPF	1000 Kwt.	50		39.2	36.8	40.5	39,2	43,1	38.9	45.6	43.7	46.1	42.7	0 77	γ γ γ γ	46.9	7 97	45.2	35.1	45.2	45.7	44.1	47.3	41.3	38° 6	47.4	41.7	1 77	37.7	34.7	42.1
	T.W.	#/Bu.		0.49	63.5	62.0	60.5	64.5	0.49	64.5		63.0		7			6.7	65.0	65.0	0.49	65.0	64.5	0.4.0	0.99	66.5	0.4°	65.0	ע	64.5	64.5	65.5
	C. I. No.																														
				1247 #1		1257 #1		1289 #1	1289 #2	1289 #3	1289 桦	1291 #1	1292 #1	1306 411		1299	1303		1303 #3	1303	1306	1307 #1		1316	1316	1323	1323 #2	1360 #1	1372	1372	1375 #2
WASHINGTON	Variety or State Sel. No.		Pullman	Durum Mut.	Durum Mut.	Durum Mut.	Durum Mut.	Durum Mut.	Durum Mut.	Durum Mut.	Durum Mut.	Durum Mut.	Durum Mut.		Durum Mat	Durum Mut	Durum Mut	Durum Mut.	Durum rauc.	Durum Mut.	Durum Mut.	Durum Mut.	Durum Mut.	Discuss Mit	Durum Mut.	Durum Mut.	Durum Mut.				

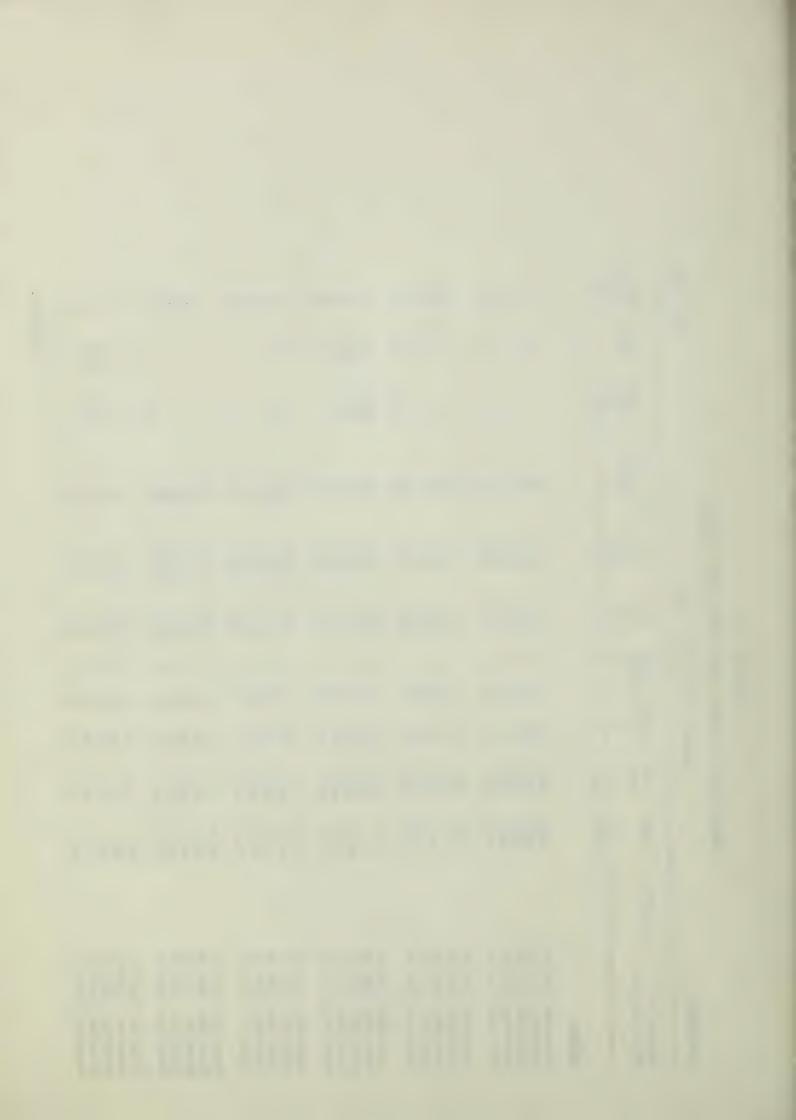


TABLE 18 (Cont'd.)

QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

State Sel. No. T.W. 1000 Kerr State Sel. No. 1/9 Kørt. 1/8. 1/9 Kørt. 1	SPECIAL DURUM	SPECIAL DURUM MUTANT SERIES		1971 CROP
mt. 1375 #3 64.0 38.2 Mut. 1376 #1 64.0 38.2 Mut. 1376 #2 64.0 38.2 Mut. 1376 #2 64.0 38.2 Mut. 1376 #2 64.0 38.2 Mut. 1376 #4 64.0 38.2 Mut. 1378 #2 64.0 38.5 Mut. 1378 #2 64.0 36.6 Mut. 1378 #3 64.0 36.6 Mut. 1378 #4 64.0 36.6 Mut. 1378 #5 64.0 36.6 Mut. 1378 #5 64.0 36.6 Mut. 1378 #5 64.0 36.1 Mut. 1378 #6 64.0 33.8 Mut. 1381 #1 61.0 32.8 Mut. 1381 #2 61.0 31.9 Mut. 1381 #3 61.0 31.9 Mut. 1381 #4 61.0 31.8 Mut. 1381 #5 61.0 31.8 Mut. 1383 #3 62.0 33.8 Mut. 1383 #3 62.0 34.2 Mut. 1383 #3 62.0 34.2 Mut. 1383 #4 62.0 34.2 Mut. 1383 #5 62.0 38.3	1000 Kerne Kwt. Lg.	Med. Sm. Pro.	Pur, Dust Color Semo, Score	r Semo, Vis. Gen. Abs. Color Eval. 2/ 5/
III (Cont'd.)  Mut. 1375 #3 64.0 38.2  Mut. 1376 #1 63.0 39.1  Mut. 1376 #2 64.0 38.2  Mut. 1376 #3 64.0 38.2  Mut. 1378 #1 64.0 38.2  Mut. 1378 #2 63.5 40.2  Mut. 1378 #5 64.0 39.8  Mut. 1378 #5 64.0 39.8  Mut. 1378 #5 64.0 39.8  Mut. 1378 #5 64.0 34.1  Mut. 1381 #1 61.0 31.9  Mut. 1381 #5 61.0 31.9  Mut. 1381 #5 61.0 31.8  Mut. 1381 #6 61.0 31.8  Mut. 1381 #6 61.0 31.8  Mut. 1381 #6 61.0 31.8  Mut. 1383 #1 62.0 33.8  Mut. 1383 #1 62.0 34.2	/Bu. g.	% %	%	%
Mut. 1375 #3 64.0 38.2  Mut. 1376 #1 63.0 39.1  Mut. 1376 #3 64.0 39.8  Mut. 1376 #4 64.0 39.8  Mut. 1378 #1 64.0 38.2  Mut. 1378 #1 64.0 38.2  Mut. 1378 #2 63.0 41.2  Mut. 1378 #5 64.0 39.8  Mut. 1378 #7 64.0 39.8  Mut. 1378 #7 64.0 39.8  Mut. 1381 #1 61.0 36.1  Mut. 1381 #6 61.0 31.6  Mut. 1381 #6 61.0 32.8  Mut. 1383 #1 61.5 31.9  Mut. 1383 #1 61.0 32.8  Mut. 1383 #1 61.0 32.8  Mut. 1383 #1 66.0 33.8  Mut. 1383 #3 62.0 33.8  Mut. 1383 #3 62.0 33.8  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 66.0 33.8  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 66.0 33.8  Mut. 1383 #4 66.0 33.8				
Mut. 1376 #1 63.0 39.1 Mut. 1376 #1 63.0 39.1 Mut. 1376 #2 64.0 39.8 Mut. 1376 #2 64.0 39.8 Mut. 1378 #2 64.0 39.8 Mut. 1378 #2 64.0 36.5 37.7 Mut. 1378 #2 64.0 36.6 Mut. 1378 #2 64.0 36.6 Mut. 1379 #2 64.0 36.1 Mut. 1379 #2 64.0 36.1 Mut. 1381 #3 64.0 33.8 Mut. 1381 #4 61.0 36.1 Mut. 1381 #5 61.0 31.6 Mut. 1381 #5 61.0 31.8 Mut. 1381 #5 61.0 31.8 Mut. 1383 #1 62.0 31.8 Mut. 1383 #1 62.0 31.8 Mut. 1383 #1 62.0 34.2 Mut. 1383 #1 62.0	38 2 7.6	-	50.3	
Mut. 1376 #2 64.0 38.2  Mut. 1376 #3 64.0 38.2  Mut. 1376 #4 64.0 38.2  Mut. 1378 #1 64.0 38.5  Mut. 1378 #2 64.0 36.6  Mut. 1378 #4 64.0 36.6  Mut. 1378 #5 63.5 37.7  Mut. 1378 #7 63.0 40.2  Mut. 1381 #1 61.0 36.1  Mut. 1381 #4 61.5 34.8  Mut. 1381 #7 61.0 31.6  Mut. 1383 #1 61.0 32.8  Mut. 1383 #1 61.5 34.8  Mut. 1383 #1 62.0 33.8  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 62.5 37.3  Mut. 1383 #5 62.0 34.2	30.1		21.8	
Mut. 1376 #3 64.0 39.8  Mut. 1376 #4 64.0 39.8  Mut. 1376 #5 64.0 38.2  Mut. 1378 #1 64.0 36.5  Mut. 1378 #5 64.0 36.6  Mut. 1378 #5 64.0 39.8  Mut. 1378 #7 64.0 39.8  Mut. 1379 #1 61.0 36.1  Mut. 1381 #1 61.0 36.1  Mut. 1381 #6 61.0 31.6  Mut. 1381 #7 61.0 31.6  Mut. 1381 #7 61.0 32.8  Mut. 1383 #1 61.0 32.8  Mut. 1383 #1 61.0 32.8  Mut. 1383 #2 61.0 31.8  Mut. 1383 #3 62.0 33.8  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 62.0 34.2  Mut. 1383 #5 62.0 34.2	29.1 44	<del>,</del> c		
Mut. 1376 #5 64.0 38.2  Mut. 1376 #5 64.0 38.2  Mut. 1378 #1 64.0 38.2  Mut. 1378 #5 64.0 36.6  Mut. 1378 #5 64.0 36.6  Mut. 1378 #5 64.0 39.8  Mut. 1378 #7 63.0 40.2  Mut. 1381 #1 61.0 36.1  Mut. 1381 #5 61.5 34.8  Mut. 1381 #6 61.0 32.8  Mut. 1381 #6 61.0 32.8  Mut. 1383 #1 61.5 34.8  Mut. 1383 #1 61.5 34.8  Mut. 1383 #1 62.0 33.8  Mut. 1383 #2 62.0 33.8  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 62.0 34.2  Mut. 1383 #5 62.0 34.2	20.00.00	7 -	52.7	
Mut. 1376 #5 63.0 41.2  Mut. 1378 #1 63.5 40.2  Mut. 1378 #3 64.0 36.6  Mut. 1378 #5 64.0 36.6  Mut. 1378 #7 63.0 40.2  Mut. 1379 #1 64.0 37.7  Mut. 1381 #1 61.0 36.1  Mut. 1381 #7 61.0 31.9  Mut. 1381 #7 61.0 32.8  Mut. 1381 #7 61.0 32.8  Mut. 1383 #1 61.0 32.8  Mut. 1383 #1 66.0 33.8  Mut. 1383 #1 66.0 33.8  Mut. 1383 #2 61.0 32.8  Mut. 1383 #1 66.0 33.8  Mut. 1383 #2 62.0 33.8  Mut. 1383 #3 62.0 34.2  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 62.5 37.3  Mut. 1383 #5 62.0 34.2	38.2	1 13.7	52.7 86	
Mut. 1376 #5 63.0 41.2  Mut. 1378 #1 63.5 40.2  Mut. 1378 #3 64.0 36.6  Mut. 1378 #5 63.5 37.7  Mut. 1378 #7 63.0 40.2  Mut. 1379 #2 63.0 37.7  Mut. 1381 #1 61.0 36.1  Mut. 1381 #7 61.0 34.1  Mut. 1381 #7 61.0 31.8  Mut. 1381 #7 61.0 32.8  Mut. 1381 #7 61.0 32.8  Mut. 1383 #1 61.5 31.9  Mut. 1383 #1 66.0 33.8  Mut. 1383 #2 61.0 32.8  Mut. 1383 #3 62.0 34.2  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 65.0 34.2  Mut. 1383 #5 62.0 34.2  Mut. 1383 #4 62.5 37.3  Mut. 1383 #5 62.0 34.2				
Mut. 1378 #1 63.5 40.2  Mut. 1378 #2 63.5 37.7  Mut. 1378 #5 64.0 36.6  Mut. 1378 #5 64.0 39.8  Mut. 1379 #2 63.0 37.7  Mut. 1381 #1 61.0 36.1  Mut. 1381 #5 61.5 34.8  Mut. 1381 #7 61.0 32.8  Mut. 1381 #7 61.0 32.8  Mut. 1381 #7 61.0 32.8  Mut. 1383 #1 662.0 33.8  Mut. 1383 #2 61.5 31.9  Mut. 1383 #3 66.0 31.8  Mut. 1383 #3 66.0 31.8  Mut. 1383 #3 66.0 33.8	0 41.2 57		52.3 85	
Mut. 1378 #2 63.5 37.7  Mut. 1378 #3 64.0 36.6  Mut. 1378 #5 64.0 36.6  Mut. 1378 #5 64.0 39.8  Mut. 1379 #2 63.0 37.7  Mut. 1381 #1 61.0 36.1  Mut. 1381 #5 61.5 34.8  Mut. 1381 #7 61.0 32.8  Mut. 1381 #7 61.0 32.8  Mut. 1381 #7 61.0 32.8  Mut. 1383 #1 662.0 33.8  Mut. 1383 #1 662.0 33.8  Mut. 1383 #2 61.5 31.9  Mut. 1383 #3 662.0 34.2  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 662.0 34.2  Mut. 1383 #5 62.0 34.2	5 40.2	4		- 2
Mut. 1378 #3 64.5 37.3  Mut. 1378 #4 64.0 36.6  Mut. 1378 #5 63.5 39.4  Mut. 1378 #7 63.0 37.7  Mut. 1381 #1 61.0 36.1  Mut. 1381 #2 61.5 31.9  Mut. 1381 #7 61.0 32.8  Mut. 1381 #7 61.0 32.8  Mut. 1381 #7 61.0 32.8  Mut. 1383 #1 66.0 33.8  Mut. 1383 #1 66.0 33.8  Mut. 1383 #1 66.0 33.8  Mut. 1383 #2 62.0 34.2  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 66.0 31.8  Mut. 1383 #3 62.0 38.2	5 37.7 24	ന		2
Mut. 1378 #5 64.0 36.6  Mut. 1378 #5 63.5 39.4  Mut. 1378 #7 63.0 37.7  Mut. 1379 #2 63.5 45.2  Mut. 1381 #1 61.0 36.1  Mut. 1381 #2 61.5 31.9  Mut. 1381 #7 61.0 32.8  Mut. 1381 #7 61.0 32.8  Mut. 1381 #7 61.0 32.8  Mut. 1383 #1 66.0 33.8  Mut. 1383 #1 66.0 33.8  Mut. 1383 #1 66.0 33.8  Mut. 1383 #2 62.0 34.2  Mut. 1383 #3 66.0 34.2  Mut. 1383 #4 66.0 33.8  Mut. 1383 #3 66.0 33.8	5 37.3 42		53.6 85	- 2
Mut. 1378 #5 63.5 39.4 Mut. 1378 #6 64.0 39.8 Mut. 1378 #7 63.0 37.7 Mut. 1379 #1 63.0 40.2 Mut. 1381 #1 61.0 36.1 Mut. 1381 #2 61.5 31.9 Mut. 1381 #7 61.0 31.8 Mut. 1381 #7 61.0 32.8 Mut. 1381 #7 61.0 32.8 Mut. 1381 #7 61.0 32.8 Mut. 1383 #1 62.0 33.8 Mut. 1383 #2 62.0 34.2 Mut. 1383 #3 62.0 34.2 Mut. 1383 #3 62.0 38.2 Mut. 1383 #5 62.0 38.2	36.6 28	က		2
Mut. 1383 #3 66.0 39.8  Mut. 1378 #6 64.0 39.8  Mut. 1379 #1 63.0 40.2  Mut. 1381 #1 61.0 36.1  Mut. 1381 #4 61.0 31.9  Mut. 1381 #5 61.0 32.8  Mut. 1381 #6 62.0 33.8  Mut. 1383 #1 61.5 34.2  Mut. 1383 #3 62.0 34.2  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 62.0 34.2  Mut. 1383 #5 62.0 34.2	30 %	c	52 7 87	
Mut. 1379 #7 63.0 37.7 Mut. 1379 #7 63.0 37.7 Mut. 1379 #2 63.5 45.2 Mut. 1381 #1 61.0 36.1 Mut. 1381 #3 61.0 31.9 Mut. 1381 #6 62.0 33.8 Mut. 1381 #8 61.0 32.8 Mut. 1383 #1 60.0 31.8 Mut. 1383 #3 62.0 34.2 Mut. 1383 #4 62.0 38.2 Mut. 1383 #6 62.0 38.2 Mut. 1383 #6 62.0 38.2	000000000000000000000000000000000000000	7		
Mut. 1379 #1 63.0 40.2  Mut. 1379 #1 63.0 40.2  Mut. 1381 #1 61.0 36.1  Mut. 1381 #2 61.5 34.1  Mut. 1381 #6 61.0 31.8  Mut. 1381 #7 61.0 32.8  Mut. 1383 #1 61.5 34.8  Mut. 1383 #1 61.5 34.8  Mut. 1383 #1 62.0 33.8  Mut. 1383 #2 62.0 34.2  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 62.5 37.3  Mut. 1383 #5 62.0 38.2  Mut. 1383 #6 62.0 34.2  Mut. 1383 #6 62.0 34.2	39.0 41	7 ~	51 6 03	1
Mut. 1379 #2 63.5 40.2  Mut. 1381 #1 61.0 36.1  Mut. 1381 #3 61.5 34.1  Mut. 1381 #4 61.0 31.6  Mut. 1381 #5 61.5 34.8  Mut. 1381 #6 62.0 33.8  Mut. 1383 #1 61.5 31.9  Mut. 1383 #3 62.0 34.2  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 62.5 37.3  Mut. 1383 #5 62.0 34.2  Mut. 1383 #5 62.0 34.2  Mut. 1383 #6 62.0 34.2  Mut. 1383 #6 62.0 34.2  Mut. 1383 #6 62.0 34.2	27 1.10	† <del>*</del>		
Mut. 1381 #1 61.0 36.1 Mut. 1381 #2 61.5 31.9 Mut. 1381 #4 61.5 34.8 Mut. 1381 #5 61.0 32.8 Mut. 1381 #7 61.0 32.8 Mut. 1383 #1 61.5 34.8 Mut. 1383 #1 62.0 34.2 Mut. 1383 #3 62.0 34.2 Mut. 1383 #4 62.5 37.3 Mut. 1383 #5 62.0 34.2 Mut. 1383 #5 62.0 34.2 Mut. 1383 #5 62.0 34.2 Mut. 1383 #5 62.0 38.2	40.2	1 12.0	51.4 83	
Mut. 1381 #1 61.0 36.1  Mut. 1381 #2 61.5 31.9  Mut. 1381 #4 61.0 31.6  Mut. 1381 #5 61.0 32.8  Mut. 1381 #7 61.0 32.8  Mut. 1383 #1 61.5 34.2  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 62.0 34.2  Mut. 1383 #5 62.0 34.2  Mut. 1383 #5 62.0 38.2  Mut. 1383 #5 62.0 38.2  Mut. 1383 #5 62.0 38.2	200	•		
Mut. 1381 #2 61.5 31.9  Mut. 1381 #3 61.5 34.1  Mut. 1381 #4 61.0 31.6  Mut. 1381 #7 61.0 32.8  Mut. 1381 #7 61.0 32.8  Mut. 1383 #1 63.5 37.7  Mut. 1383 #3 62.0 34.2  Mut. 1383 #3 62.0 34.2  Mut. 1383 #5 62.0 34.2  Mut. 1383 #5 62.0 38.2  Mut. 1383 #5 62.0 38.2	36.1 27	7		10.5
Mut. 1381 #3 61.5 34.1  Mut. 1381 #4 61.0 31.6  Mut. 1381 #5 61.5 34.8  Mut. 1381 #7 62.0 33.8  Mut. 1383 #1 63.5 37.7  Mut. 1383 #3 62.0 34.2  Mut. 1383 #5 62.0 38.2	31.9	4	50.5	35.7 10.5 4
Mut. 1381 #4 61.0 31.6 Mut. 1381 #5 61.5 34.8 Mut. 1381 #6 62.0 33.8 Mut. 1383 #1 61.5 31.9 Mut. 1383 #2 60.0 31.8 Mut. 1383 #3 62.0 34.2 Mut. 1383 #5 62.0 34.2 Mut. 1383 #5 62.0 34.2 Mut. 1383 #6 62.0 34.2 Mut. 1383 #6 62.0 38.2	34.1 25	4		1
Mut. 1381 #5 61.5 34.8  Mut. 1381 #6 62.0 33.8  Mut. 1381 #7 61.0 32.8  Mut. 1383 #1 63.5 37.7  Mut. 1383 #3 62.0 34.2  Mut. 1383 #5 62.0 34.2  Mut. 1383 #5 62.0 38.2  Mut. 1383 #6 62.0 38.2	31.6	7 12.5	51.8 90	0 10
Mut. 1381 #6 62.0 33.8  Mut. 1381 #7 61.0 32.8  Mut. 1383 #1 63.5 37.7  Mut. 1383 #3 62.0 34.2  Mut. 1383 #4 62.5 37.3  Mut. 1383 #5 62.0 34.2  Mut. 1383 #6 62.0 38.2	34.8 19	٠.	51.4 85	- 5
Mut. 1381 #7 61.0 32.8 Mut. 1383 #1 63.5 37.7 Mut. 1383 #2 60.0 31.8 Mut. 1383 #3 62.0 34.2 Mut. 1383 #5 62.0 34.2 Mut. 1383 #5 62.0 38.2 Mut. 1383 #6 62.0 38.2	0 33.8 18	S		
Mut. 1381 #8 61.5 31.9  Mut. 1383 #1 63.5 37.7  Mut. 1383 #3 62.0 34.2  Mut. 1383 #5 62.0 34.2  Mut. 1383 #5 62.0 39.2  Mut. 1383 #6 62.0 38.2	0 32.8 12	9		
Mut. 1383 #1 63.5 37.7  Mut. 1383 #2 60.0 31.8  Mut. 1383 #3 62.0 34.2  Mut. 1383 #5 62.0 39.2  Mut. 1383 #6 62.0 39.2  Mut. 1383 #6 62.0 38.2	5 31,9 11	2		- 2
Mut. 1383 #2 60.0 31.8  Mut. 1383 #3 62.0 34.2  Mut. 1383 #5 62.5 37.3  Mut. 1383 #5 64.0 39.2  Mut. 1383 #6 62.0 38.2	5 37.7	3 11.8	52.7 80	
Mut. 1383 #3 62.0 34.2 Mut. 1383 #4 62.5 37.3 Mut. 1383 #5 64.0 39.2 Mut. 1383 #6 62.0 38.2	0 31.8 21	5		34.7 10.5 4
Mut. 1383 #4 62.5 37.3 Mut. 1383 #5 64.0 39.2 Mut. 1383 #6 62.0 38.2	34.2 23			- 2
Mut. 1383 #5 64.0 39.2 Mut. 1383 #6 62.0 38.2	37.3 28	5		2
Mut. 1383 #6 62.0 38.2	39.2	4	54.1 83	
Mr. 130F 43	38.2 29			
45.8	45.8 51	ຠ		•

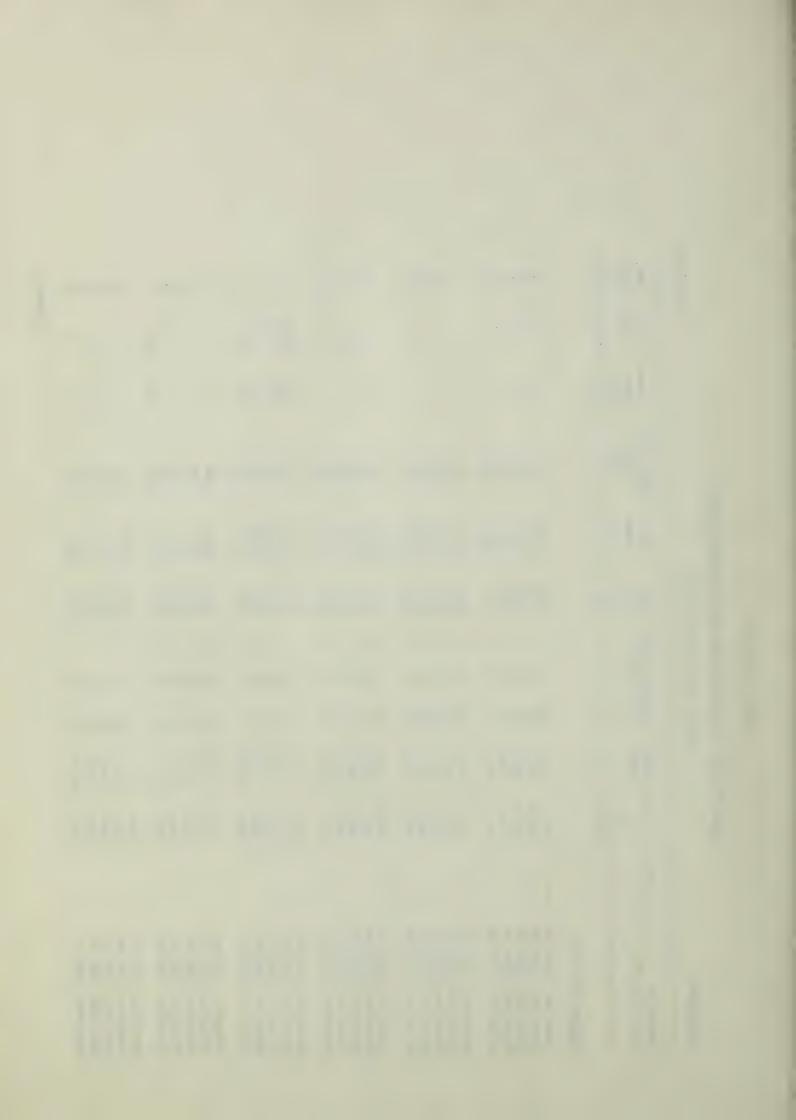


TABLE 18 (Cont'd.)

### QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

WASHINGTON		SPE	CIAL D	URUM M	UTANT	SPECIAL DURUM MUTANT SERIES				19.	1971 CROP
Variety or C.I. No.	vo. T.W.	1000	Kern	Kernel Size	ze	Wht.	Pur.	Dust Color	Semo.	Vis.	Gen.
State Sel. No.	1/	Kwt.	Lg.	Med. Sm.	Sm.	Pro. 2/	Semo.	Score	Abs. 2/	Color	Eval. 5/
	#/Bu.	00	%	%	%	%	%		%		
Pullman (Cont'd.)											
Durum Mut. 1385 #2	63,0	37.0	19	92	2	10.2	52.0	. 48	•	•	2
1385	61.5	36.1	17	78	5	11.8	50.5	82		•	2
1385 #4	65.0	41.5	51	94	m	11.5	52.7	83	1	4	2
Durum Mut. 1385 #5	63.0	38.9	27	89	2	10.8	51.1	83	<b>I</b> ,	1	7
Durum Mut. 1385 #6	0.49	41.2	45	52	ന	11.8	54.0	82	,	ı	2
Durum Mut. 1385 #7	63.5	40.8	35	62	m	10.8	50.5	83	•	`•	7
Durum Mut. 1385 #8	63.0	40.5	38	59	3	11,4	52.0	82	1	•	7
Durum Mut. 1385 #9	62.5	35.6	35	09	'n	11.1	52.0	80		r	7
Durum Mut. 1385 #10	0.49	41.0	41	26	m	11.1	48.6	83		ı	2
Durum Mut, 1385 #11	62.5	36.4	25	73	ന	11.0	50.9	80	•		7
Durum Mut. 1385 #12	62.0	32.4	13	82	7	11.8	51.6	86	•	•	က
Durum Mut. 1386 #1	64.0	36.2	19	77	4	10.7	50.9	70	•	•	
Durum Mut. 1386 #2	0.49	39.7	94	51	m	11.5	51.4	. 08		1	. 2
Durum Mut. 1386 #3	63.0	40.5	07	57	ო	11.8	9.67	82	•	1	7
Durum Mut. 1386 #4	64.5	37.5	33	79	ć,	10.8	50.0	82	1		7
Durum Mut. 1386 #5	61.5	32.8	15	42	9	11.2	51.1	. 06	34.7	10.0	4
Durum Mut. 1386 #6	63.0	35.7	56	69	2	10.8	51.4	87	i		ന
1/ Unofficial 2/ 14% Moisture Basis											
	not acceptab	le, norma	11y; h	owever	, due	to the	excellen	cceptable, normally; however, due to the excellent color this crop year, the minimum	crop year	, the min	Timum.
/ 1 - No Promise, 2 - Little	Little Promise,	ie, 3 - So	Some Promise,	mise,	4 - G	- Good Prom	Promise.			score is 88.	. 88

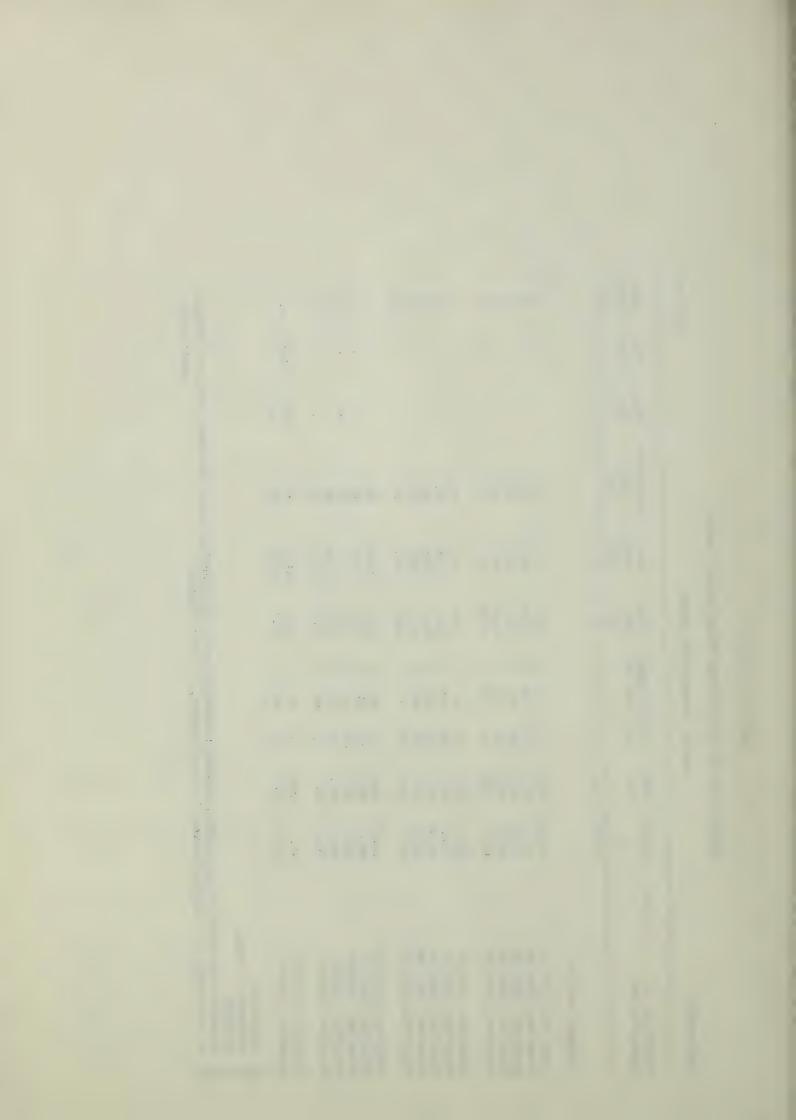


TABLE 19

QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

WASHINGTON			SPECL	AL K680	0707 MUT	SPECIAL K6800707 MUTANT SERIES	SS			197	1971 CROP
Variety or State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kerne Lg.	Kernel Size Lg. Med. Sm.	Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
		#/Bu.	60	%	% %	%	%		%		
Pullman											
K6800707 Mut. #1		65.0	49,3	80	19 1	13.0	53,4	87	1	1	3
		63.0	32,3	16	7 77	10,5	53.2	82	•	•	2
		63.5	42.7	63	36 1	12.9	51.8	85	•	1	2
		64.0	41.2	63	36 1	14.1	53.0	92	34.7	10.5	4
Mut.		62.0	37.9	27	40 3	13.5	49.3	87		•	ო
K6800707 Mut. #6		63.5	44.1	89	30 2	12.7	50.0	. 68	35.7	9.5	က
K6800707 Mut. #7		62.2	42.2	58	41 1	12.8	49.5	90	36.0	10.0	4
K6800707 Mut. #8		63,3	41.0	58	41 1	15.0	51,1	92	35.0	10.0	4
K6800707 Mut. #9		65.0	51,3	84	15 1	12,3	51.6	80	•	1	2
K6800707 Mut. #10		61.2	44.4	65	34 1	14.0	49.1	80	•	•	2
K6800707 Mut. #11	•••	63.5	38.2	35	61 4	11.2	52.5	78	₿,		
Mut.	2	63.0	41.8	61	37 2	11.8	50.2	83		ľ	2
Mut.		64.0	43.1	99		13.8	51.4	96	36.0	10.5	4
K6800707 Mut. #14	.+	64.7	43.7	71	28 1	14.5	51.6	96	36.0	10.0	4
K6800707 Mut. #15		0.49	39.5	28	41 1	14.4	50.9	76	35.7	10.5	4
Mut.	9	63.5	36.1	47	51 2	12.8	50.9	96	38.0	10.5	4
Mut.	_	0.49	50.3	79	20 1	13.7	48.9	85	•	,	2
K6800707 Mut. #18	•	65.0	43.1	09	39 1	13.0	53.4	97	35,3	10.5	4
Mut.		0.49	43.7	61	36 3	11.8	48.9	85	•	•	2
K6800707 Mut. #20	0	63.0	36.5	28		11.7	20.0	80	í.		2
										3	(CONT'D.)



TABLE 19 (Cont'd.)

QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

WASHINGTON					SPECIA	1L K68(	1 20700	MUTAN	SPECIAL K6800707 MUTANT SERIES	S			19.	1971 CROP
Variety or State Sel. No.		C.I. No.	No.	T.W.	1000 Kwt.	Kerne Lg.	Kernel Size Lg. Med. Sm	Sm.	Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
				#/Bu.	00	%	%	%	P2	%		%		
Pullman (Cont'd.)	(.b'													
K6800707 Mut.	#21			64.5	42.6	89	31	-4	13,8	52.1	. 93	35.0	10.5	4
K6800707 Mut.				63.5	46.7	69	30		13,3	50.0	85	1	<b>1</b>	2
K6800707 Mut.				63.5	49.5	77	22	-	13.4	49.8	82	1	1 -	2
K6800707 Mut.				0.49	38,3	39	.58	3	12,4	53.9	80		,	7
K6800707 Mut.				63.5	43.3	20	56	· -	13.0	20°2	96	37.7	10.0	4
K6800707 Mut.	#26			63,5	36.9	29	99	5	12.8	52.7	85	. 1	•	2
K6800707 Mut.				62,5	38.2	94	52	. 7	13,1	49.8	100	37.3	10.5	4
				62.5	47.8	75	25	0	15,4	46.8	85	1	1	2
	#29	•		63.0	40.5	64	20	-1	13,1	49.3	85	1	ı	2
K6800707 Mut.				62.0	49.3	81	18		15.8	48.9	85-R		•	2
K6800707 Mut.	#31			64.0	46.3	35	979	girel.	13.7	51.8	86	35,3	10.5	4
K6800707 Mut.				63.5	44.8	89	31	-	14.5	51.4	97	35.0	10.5	4
K6800707 Mut.	#33			63.0	35,3	48	51	red	15,3	49.5	86	35.7	10.5	4
K6800707 Mut.				0.49	45.4	63	36	-	13,5	53.2	06	35.3	10.5	4
1/ Unofficial 2/ 14% Moisture Basis 3/ Purified 4/ Below 80 color sco	ture color	Basis r score	not Littl	Unofficial 14% Moisture Basis Purified Below 80 color score not acceptable 1 - No Promise, 2 - Little Promise,	e, normal	Lly; he	owever nise,	due 4 - G	to the	excelle mise.	Unofficial 14% Moisture Basis Purified Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise.	crop year	r, the minimum score is 88.	11mum



QUALITY DATA ON SPECIAL DURUM WHEAT SAMPLES

WASHINGTON		FROM	FROM REGULAR DURUM NURSERY 1970 NORTH DAKOTA	DURUM	NURSER	X 197	O NORTH	DAKOTA			. 197	1971 CROP
Variety or State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kerne Lg.	Kernel Size Lg. Med. Sm.		Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
		#/Bu.	<b>0</b> 0	%	%	%	. %	%		%		
Pullman												
CP 132 D 6674		61.5	58.5	77	21	2 2	12.9 13.6	53.2	93	38.3 35.0	7.5	7 4
D 6761		63.5	50.2	73	56		12.8	52.3	91	34.3	9.5	4
1/ Unofficial $\frac{2}{4}$ Moisture Basis $\frac{3}{4}$ Purified $\frac{4}{5}$ normally; however, due to the excellent color this crop year, the minimum $\frac{4}{5}$ 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise.	sis score not a 2 - Little	cceptabl	.e, normal	.ly; ho e Prom	wever, ise, 4	que	to the e	xcellent Se.	color this c	rop year,	, the minimum score is 88.	ıimum 88.

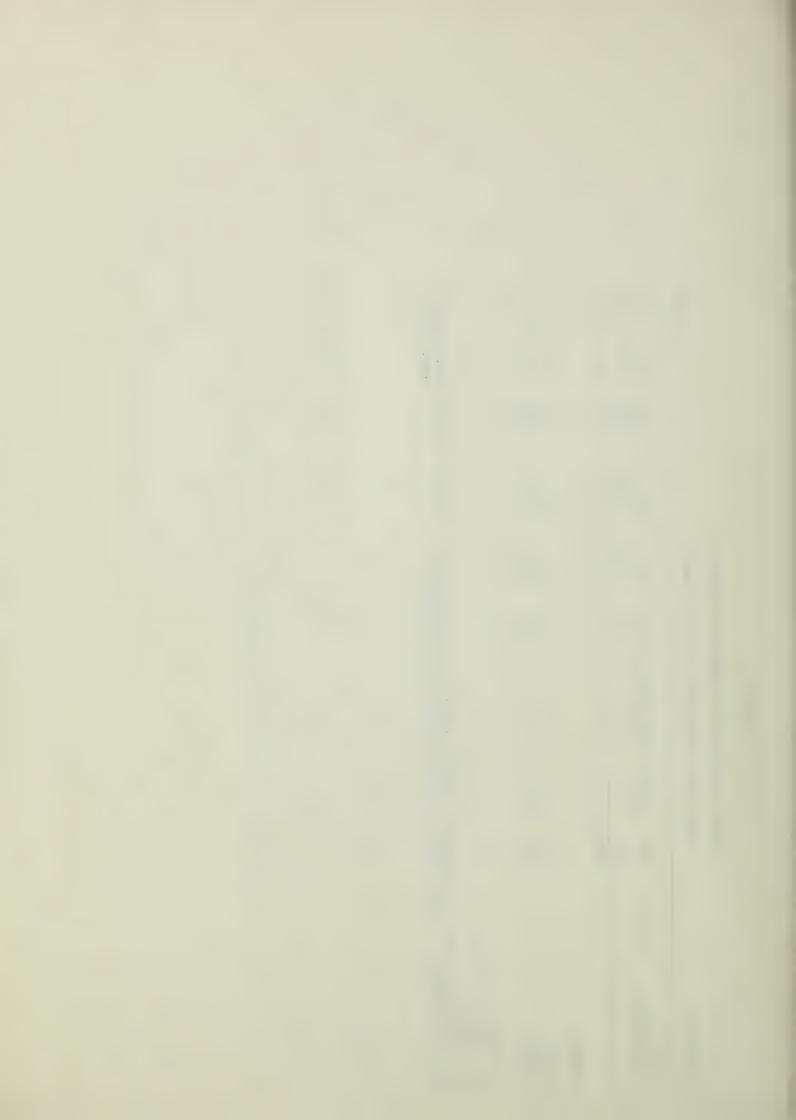


TABLE 21

QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

WASHINGTON			SPECIAL 50	80	SAMPLES		1	1971 CROP
Variety or State Sel. No.	1000 Kwt.	Dust Color Score	Gen. Eval.	٠.	Variety or State Sel. No.	1000 Kwt.	Dust Color Score	Gen. Eval.
	80					φ b0		
Pullman					Pullman			
K680070 Mut. #35	43.3	97	7				85	2
Mut.	41.3	83	7 0				87	<b>ش</b> +
K680070 Mut. #37	41.0				Durum Mut. 1306-2	-2 41.8	0 68	<b>-</b> ←
Mut.	48.1	96	14				75	) <del>,</del> f
K680070 Mut. #40	44.2	75	<del>,-1</del>		Durum Mut. 1324-2	-2 44.1	89	<u>რ</u>
Mut.	35,1	92	1		Durum Mut. 1369-2		. 82	2
Mut.	38.5		4		Durum Mut. 1375-4		80	2
Mut.	48.3	. 83	7		NDD 63152-12-3	33.8	\$2:	7
K680070 Mut. #44	45.5	. 16	7		NDD 63152-24-1	45.0	00 00	m
K680070 Mut. #45	44.4	102	4		NDD 63152-26-1	40.7	85	2
Mut.	38.0	70	<b>-</b>			44.4	82	7
Mut.	37.9	104	4.		NDD 64056-12-1	39°8	82	7 0
	20.00	9/	寸 ┺		NDD 64056-12-2	41.7	φ 0 2 3	<b>7</b> C
K6800/0 Mut. #49	39.4	c <sub>o</sub>			NDD 04030-12-3	40.7	ç 0	7
K680070 Mut. #50	35.6	105	4			41.0	06	က
Mut。	33,1	105	4			46.1	06	<b>ო</b>
Mut.	37.7	100	7			39.8	06	m
Mut.	4.44	104	4			42.0	08	7
K680070 Mut. #54	47.6	75			NDD 64150-59-3	40.5	8/	m
K680070 Mut. #55	40.5	96	4		NDD 64150-94-1	38,3	80	2
K680070 Mut. #56	38.9	95	4		NDD 64150-94-2	43.3	. 82	2
Mut.	41.8	102	4		NDD 64150-94-3	45.0	82	7
Mut.	7.47	76	4.					
K680070 Mut. #59	45.2	16	4					
	46.7	85	2 2					
K680070 Mut. #61	40.7	822	<b>~</b>					
mar.	33.2	16	ţ					

 $<sup>\</sup>frac{1}{2}$ / Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum  $\frac{1}{2}$ / 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise.

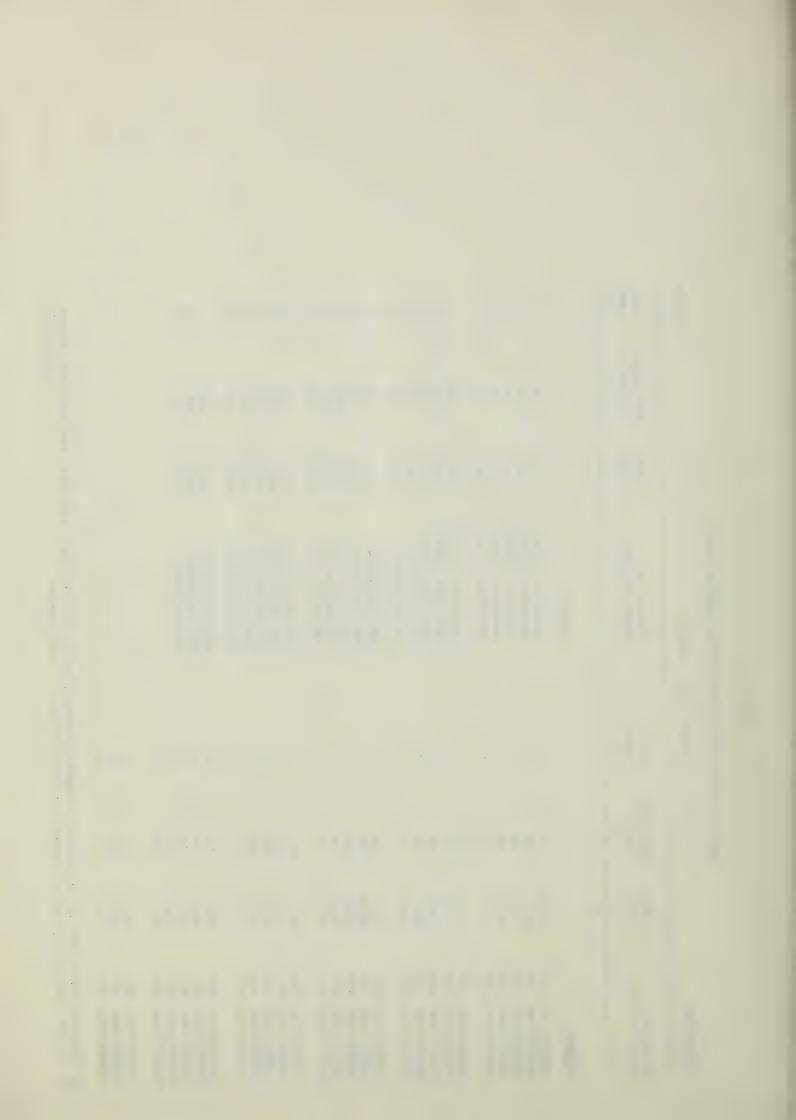


TABLE 22

### QUALITY DATA ON SPECIAL DURUM WHEAT NURSERY SAMPLES

#### FROM CHILEAN DURUM NURSERY

WASHINGTON										197	1971 CROP
Variety or C.I. No. State Sel. No.	T.W.	1000 Kwt.	Kerne Lg.	Kernel Size Lg. Med. Sm.	ું ફ	Wht. Pro. 2/	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
	#/Bu.	<b>0</b> 0	%	%	%	%	%		%		
Royal Slope											
СНD 70101	63.5	53.8	75	33	. 2	12,1	51,4	70 -	35.7	7.0	-
CHD 70105	62.0	62.5	85	14		14.4	51.4	75-R	37.7	8.0-R	<del></del> 1
СНD 70111	62.5	52.4	78	21	<del></del> 1	13,2	49.5	.08	39,3	8,5	2
СНD 70113	62.0	55.6	20	28	5	13,1	53.2	70	38.3	7.0	
СНD 70120	62.0	59.9	83	16	7	14.4	52.3	75-R	39.0	7.5-R	-1
1/ Unofficial 2/ 14% moisture basis 3/ Purified 4/ Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum 5/ 1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4 - Good Promise.	acceptable e Promise	e, norma.	11y; ho	wever, ise, 4	due Go	to the	excellent ise.	color this c	crop year, the minimum score is 88. R - Red.	the min 18. R -	imum Red.

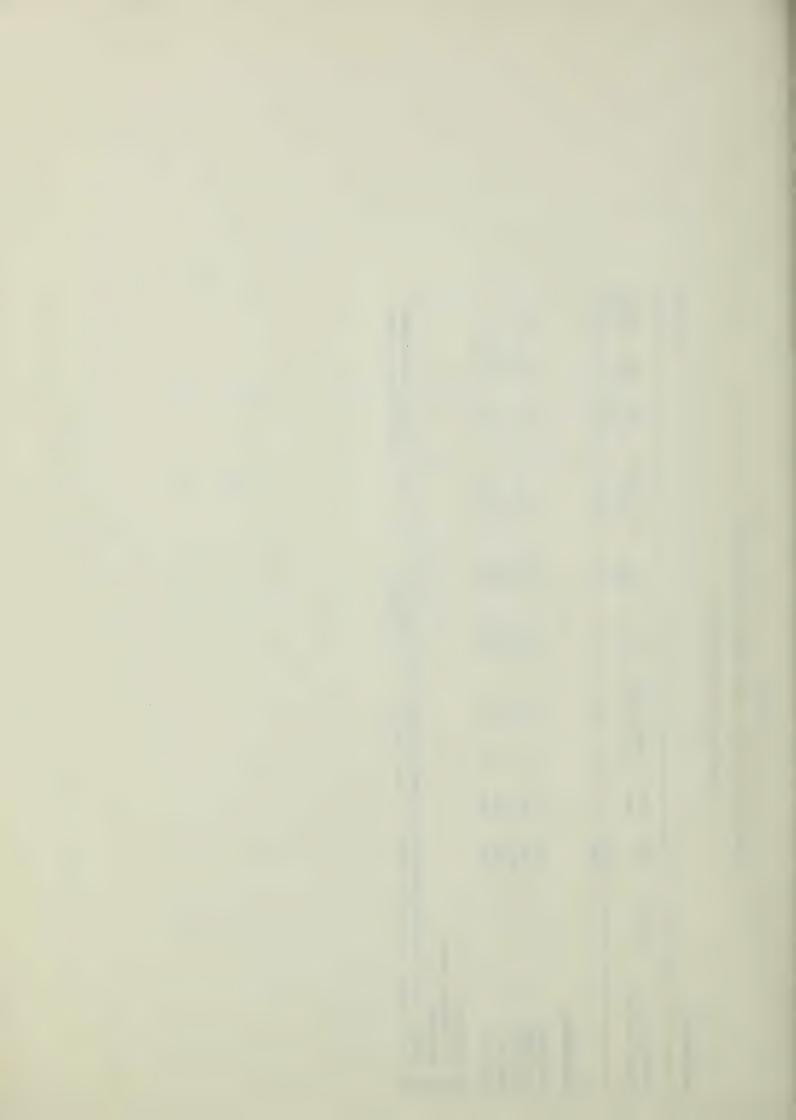


TABLE 23

QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

MINNESOTA

		1/	Kwt.	Lg.	Med. Sm.		Pro. 2/	Semo. 3/	Score	Abs. 2/	Color	Eval. 5/
Crookston		#/Bu•	å	%	%	%	%	8		%		
Hercules		62.0	45.0	56	43		12.4	53,3	89	34.3	10.0	7
Lakota	13335	63.5	39.2	39	28		11.4	53.6	88	35.0	9.5	ლ .
Leeds	13768	65.5	43.9	55	777		12.8	54.9	93	33.0	10.0	4 0
Mindum Rolette	5296	64.5	47.8	2 08	119	7	13.7	56.2	85	34.0	9.5	ა რ 
Wascana		60.5	48.5	92	23		12.7	52.1	92	35,3	10.0	4
Wells	13333	64.5	37.0	39	58	3	12,6	54.4	89	33.7	10.0	4
DT 327		62.0	47.6	70	29		11,4	54.4	93	35.0	10.0	4
D6647		0.49	41.0	33	99	-	11,1	52,3	85	•	•	7
D6674		64.5	47.1	65	34		12.5	26.9	88	33.7	10.0	à
D6676		62.0	44.4	09	39	;;;;	12,7	54.4	88	33,3	10.0	4
D6714		64.5	45.0	65	34	-	12,5	55,4	87		1	٣
D6715		64.5	46.9	20	29	-	12,7	54.6	87	•	1	ന
D6718		65.0	46.1	69	30	-	11.9	53.8	85	•	1	7
D6721		63.0	45.7	61	38		12,1	54.4	85	•	ı	2
D6722		0.49	45.6	55	43	2	12.5	52.0	90	33.0	10.0	4
D6723		0.49	43.7	63.	36		11.9	54.6	90	33,3	9.5	4
D6733		62.0	44.8	71	28		12,2	55.4	85	1.	•	7
D6761		62.0	46.5	69	30	-	12,2	54.4	85	1,		7
D6838		62.0	6*97	63	34		11.5	54.4	75		•	-
D6876		63.0	42.7	59	40	,i	12.3	52.8	98	•	•	7
1/ Unofficial 2/ 14% Moisture Basis 3/ Purified	Basis											

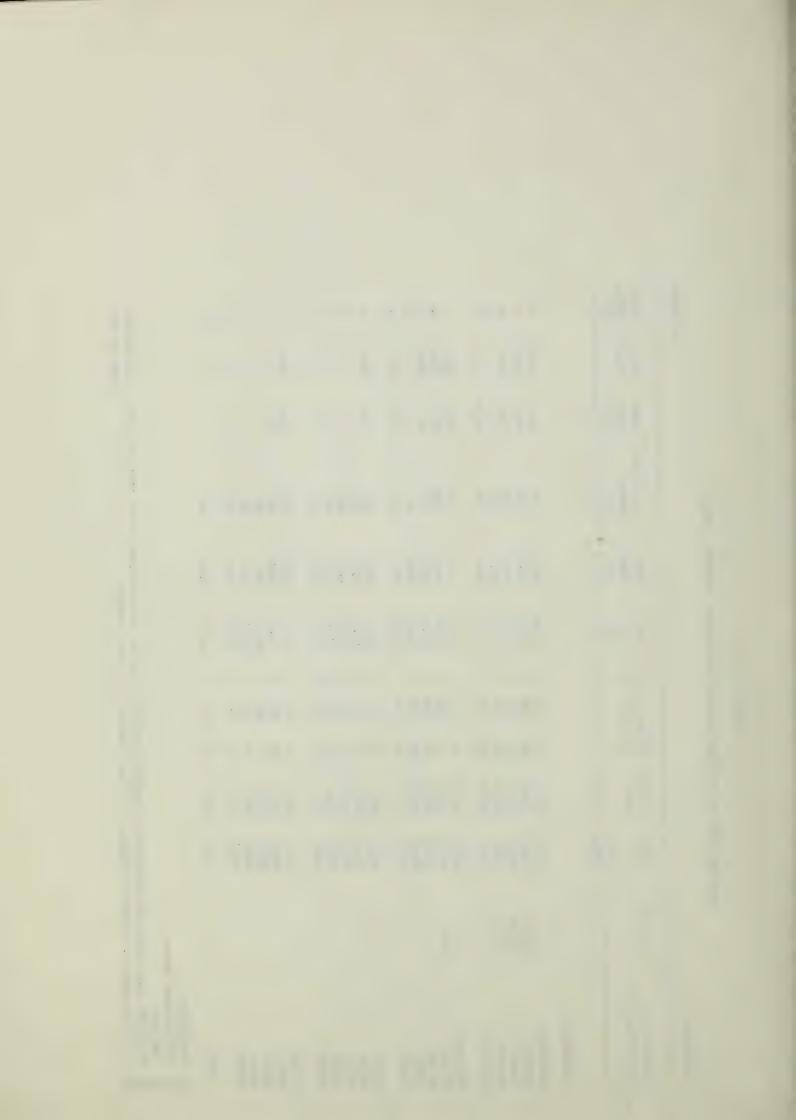


TABLE 24

QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

tte Sel. No. T.W. 1000 Kernel Size Nht. Pur. Dust Color Semo. 4/4.  1	Sel, No. C.I. No. T.W. 1000 Kernel Size Wht. Pur. Dust Color Semo.  1	MINNESOTA											19.	1971 CROP
Mortis  Hercules	Morris  Hercules  Hidden  Hidden  Hidden  Hidden  Hidden  Hidden  Hidden  Hidden  Hidden  Hercules  Hercules  Hercules  Hercules  Hidden  Hi	Variety or State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kerne Lg.	S.	Sin Sin	Wht. Pro.	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
Hercules	Mortis           Hercules         62.5         38.9         44         53         3         12.8         54.6         91         34.0         10.0           Laketa         13335         61.0         30.7         9         85         6         12.7         51.5         94         34.7         10.0           Laketa         13768         61.0         30.7         9         85         6         11.7         51.6         94         34.7         10.0           Mandam         52.96         65.5         33.7         15         82         3         11.4         52.6         94         34.7         10.0           Mandam         52.96         65.5         36.5         27         69         4         13.1         52.6         91         34.7         10.0           Wascama         57.5         32.4         16         79         5         15.1         47.7         100         34.3         10.0           Web 1s         37         6.0         37.9         36         2         12.8         52.5         96         34.7         10.0           Mobil         6.0         37.9         36         2			#/Bu.	80	%	%	%	%	%		%		
Hercules 1335 62.5 38.9 44 53 12.8 54.6 91 34.0 10.0 Leaked 1330 62.5 38.9 44 53 12.8 54.6 91 34.0 10.0 Leaked 1330 62.0 33.7 9 85 6 12.7 51.5 93 36.3 10.0 Leaked 52.6 37.3 36.5 27 69 4 13.1 53.6 94 34.7 10.0 Leaked 62.5 37.3 36.5 27 69 4 13.1 53.6 91 34.0 10.0 Leaked 62.5 37.3 36.5 27 69 4 13.1 53.6 91 34.0 10.0 Leaked 62.0 29.1 7 86 7 11.7 52.0 80 34.3 10.5 Leaked 63.0 30.0 11 8 6 71.8 52.6 99 3 34.7 10.0 Leaked 63.0 37.9 11 8 6 12.8 52.6 99 3 34.7 10.0 Leaked 7 10.0 Leak	Hercules 62.5 38.9 44 53 3 12.8 54.6 91 34.0 10.0 Lakota 13335 61.0 30.7 9 85 6 12.7 51.5 94 34.0 10.0 Lakota 13368 63.5 37.7 9 85 6 12.7 51.5 94 34.0 10.0 Lakota 13368 63.5 37.3 36 5 9 11.7 52.0 80 3.0 3.0 10.0 Lakota 5296 63.5 37.3 36 5 9 11.7 52.0 80 3.0 3.0 10.0 Lakota 5296 63.5 37.3 36.5 27 69 4 13.1 53.6 91 34.0 10.0 Lakota 52.0 63.0 37.0 11 8 8 11.7 52.0 80 33.7 10.5 Lakota 56.2 30.0 11 8 77 5 11.9 52.5 96 33.7 10.5 Lakota 56.2 30.0 11 8 77 5 11.9 52.5 96 33.7 10.5 Lakota 56.2 30.0 11 8 77 5 11.9 52.5 96 33.7 10.0 Lakota 56.2 30.0 37.0 11 8 77 5 11.9 52.5 96 33.7 10.0 Lakota 56.2 30.0 37.0 11 8 77 5 11.9 52.5 96 33.7 10.0 Lakota 56.2 30.0 37.0 11 8 77 5 11.9 52.5 96 33.7 10.0 Lakota 56.2 36.0 37.0 37.0 11 8 77 5 11.9 52.5 96 33.1 10.0 Lakota 56.2 36.0 37.0 37.0 11 8 12.0 52.5 97 97 97 97 97 97 97 97 97 97 97 97 97	Morris												
Lacketa 1335 61.0 30.7 9 85 6 12.7 51.5 93 36.3 10.0  Leeds 13768 62.5 37.3 15 82 3 13.4 52.6 94 4.7 10.0  Rolette 52.6 37.3 37.5 15 82 3 13.4 52.6 94 4.7 10.0  Rolette 62.5 37.3 16 59 4 13.1 52.6 91 34.0 10.0  Wascana 57.5 32.4 16 79 5 15.1 47.7 100 34.3 10.5  Walls 37.7 15 86 7 12.8 52.5 93 33.7 10.0  D6674 63.0 37.0 18 77 5 12.8 52.5 96 35.7 10.0  D6675 64.0 37.9 35 62 3 12.5 53.3 94 34.0 10.0  D6715 63.0 37.9 35 62 3 12.5 53.3 94 34.0 10.0  D6715 63.0 37.9 35 62 3 12.5 53.3 94 34.0 10.0  D6715 63.0 37.9 35 62 3 12.4 54.8 91 34.7 10.0  D6715 63.0 37.9 36 62 3 12.4 54.8 91 34.7 10.0  D6715 63.0 37.9 36 62 3 12.4 54.8 91 34.7 10.0  D6715 63.0 37.6 33 63 4 12.9 52.8 99 36.7 10.0  D6715 63.0 37.6 33 63 4 12.9 52.8 99 36.7 10.0  D6715 63.0 37.6 33 63 4 12.9 55.8 99 36.7 10.0  D6715 63.0 37.7 29 67 4 12.9 55.8 99 36.7 10.0  D6715 63.0 35.7 29 67 4 12.9 55.8 99 36.7 10.0  D6715 63.0 34.7 29 67 4 12.9 55.8 99 36.7 10.0  D6876 63.0 34.7 29 67 4 12.9 53.3 84 0 34.0 10.0  D68876 63.0 34.1 23 73 4 12.6 53.0 90 34.7 10.0  D68876 7 1 10.0 10.0  D68876 7 10.0 10.0  D68876 7 1 10.0 10.0  D68876 7 1 10.0 10.0  D68876 7 10.0 10.0  D68876 7 1 10.0 10.0  D68876 7 1 10.0 10.0  D68876 7 10.0 10.0  D68877 7 10.0	Parketa   13335   61.0   30.7   9   85   6   12.7   51.5   93   36.3   10.0     Mindam   5296   63.5   37.3   36   9   5   13.4   52.0   94   34.7   10.0     Rolette   5296   63.5   37.3   36.5   27   69   4   13.1   53.6   91   34.0   10.0     Wasscana   57.5   32.4   16   79   5   15.1   47.7   100   34.3   10.5     Wasls   52.0   29.1   7   86   7   12.8   52.6   93   33.7   10.0     Mells   52.0   37.0   18   77   5   11.9   54.1   86       D6647   63.0   37.9   35   62   3   12.5   53.3   94   34.0   10.0     D6714   63.0   37.9   35   62   3   12.5   53.3   94   34.0   10.0     D6718   63.0   37.9   35   62   3   12.4   54.8   91   34.7   10.0     D6718   63.0   37.9   35   62   3   12.4   54.8   91   34.7   10.0     D6718   63.0   37.9   37.9   37.9   37.9   37.9   37.9   37.9     D6718   63.0   37.5   37.9   37.9   37.9   37.9     D6718   63.0   37.5   37.9   37.9   37.9     D6718   63.0   37.5   37.8     D6718   77.5   77.5   77.5     D6710   77.5   77.5     D6718   77.5   77.5   77.5     D6718   77.5	Hercules		62,5	38.9	77	53	e	12.8	54.6	91	34.0	10.0	4
Liecks   13768   63.5   33.7   15   82   3   13.4   52.6   94   34.7   10.0     Mindam   5296   62.5   37.3   36.5   59   5   11.7   52.0   80       Mascana   5296   62.5   37.3   36.5   5   11.7   52.0   80       Mascana   57.5   32.4   16   79   5   13.1   53.6   94   34.7   10.0     Mascana   57.5   32.4   16   79   5   15.1   47.7   100   34.3   10.5     DEGAT   60.5   30.0   11   83   6   12.8   52.5   96   35.7   10.5     DEGAT   63.0   37.9   27   68   5   12.5   53.3   94   34.0   10.0     DEGAT   63.0   37.9   27   68   5   12.5   53.1   87       DEGAT   63.0   37.9   35   62   3   12.4   54.8   91   34.7   10.0     DEGAT   63.0   37.2   37   60   3   12.4   54.8   91   34.7   10.0     DEGAT   63.0   37.5	Mindum 5296 63.5 33.7 15 82 3 13.4 52.6 94 34.7 10.0 Mindum 5296 62.5 37.3 36.5 2 7 6 94 4 34.7 10.0 Galette 63.5 36.5 2 7 6 9 4 11.7 52.0 94 34.7 10.0 Galette 63.5 36.5 2 7 6 9 4 11.7 52.0 91 34.3 10.5 Galette 1333 62.0 29.1 7 86 7 12.8 52.5 96 33.7 10.5 Galette 63.0 37.0 18 7 68 7 12.8 52.5 96 33.7 10.5 Galette 63.0 37.0 18 7 68 5 12.8 52.5 96 33.7 10.5 Galette 63.0 37.0 18 7 68 5 12.2 53.3 94 34.0 10.0 Galette 63.0 37.9 38 59 3 12.2 53.1 87 Galette 63.0 37.9 38 59 3 12.2 53.1 87 Galette 63.0 37.9 38 59 3 12.2 53.1 87 Galette 63.0 37.9 38 60 3 12.4 54.8 99 33.7 10.0 Galette 63.0 37.6 37.9 67 4 12.8 53.8 89 33.7 10.0 Galette 63.0 37.6 37.7 4 12.8 53.8 89 33.7 10.0 Galette 63.0 37.6 37.7 4 12.9 52.8 92 33.7 10.0 Galette 63.0 37.7 25 71 4 12.9 52.8 92 34.0 10.0 Galette 63.0 35.7 25 71 4 12.9 52.8 92 34.0 10.0 Galette 63.0 34.7 25 71 4 12.9 53.3 85 6 34.0 10.0 Galette 62.5 35.1 13 81 6 11.9 53.3 85 6 34.0 10.0 Galette 62.5 35.1 13 81 6 11.9 53.3 85 6 34.7 10.0 Galette 62.5 35.1 13 81 6 11.9 53.3 85 6 34.7 10.0 Galette 62.5 35.0 80 Galette acceptable, normally; however, due to the excellent color this crop year, the minute followed for the care the minute followed for the care the minute followed	Lakota	13335	61.0	30°7	6	85	. 9	12.7	51.5	93	36,3	10.0	4
Mindum 5296 62.5 37.3 36 59 5 11,7 52.0 80  Rolette 53.5 36.5 27 69 4 13.1 53.6 91 34.0 10.0  Wascana 57.5 32.4 16 79 5 15.1 47.7 100 34.3 10.5  DE 57.5 32.4 16 79 5 15.1 47.7 100 34.3 10.5  DE 57.5 32.4 16 79 5 15.1 47.7 100 34.3 10.5  DE 57.5 32.0 32.0 17 86 7 12.8 52.5 96 35.7 10.0  DE 57.6 33.0 37.0 18 77 5 11.9 54.1 86 3.7 10.0  DE 57.6 53.0 37.9 35 62 3 12.5 53.3 94 34.7 10.0  DE 57.6 53.0 37.9 38 59 3 12.5 53.1 87 10.0  DE 57.6 53.0 37.9 38 59 3 12.4 54.8 91 34.7 10.0  DE 57.8 53.0 38.8 29 67 4 13.0 54.7 89 36.7 10.0  DE 57.8 53.0 37.0 37.0 37.0 4 12.9 52.8 92 33.7 10.0  DE 57.8 53.0 34.7 29 67 4 12.9 52.8 92 36.0 10.0  DE 57.8 53.0 34.7 29 67 4 12.9 55.8 92 36.0 10.0  DE 57.8 53.0 34.7 29 67 4 12.9 55.8 92 36.0 10.0  DE 57.8 53.0 34.1 23 73 4 12.9 53.3 85.0 30.0 34.7 10.0  DE 57.8 53.0 34.1 23 73 4 12.6 53.0 90 34.7 10.0	Mindum 5296 62.5 37.3 36 59 5 11.7 52.0 80  Rolette 53.5 36.5 27 69 4 13.1 53.6 91 34.0 10.0  Wascana 57.5 32.4 16 79 5 15.1 47.7 100 34.3 10.5  Wells 1333 65.0 32.0 11 86 7 12.8 52.5 95 33.7 10.0  D6674 63.0 37.9 35 62 3 12.5 53.3 94 34.0 10.0  D6774 63.0 37.9 35 62 3 12.5 53.1 87 10.0  D6714 63.0 37.9 38 59 3 12.5 53.1 87 10.0  D6715 63.0 37.9 38 59 3 12.4 54.8 89 36.7 10.0  D6716 63.0 37.6 33 63 4 12.9 52.8 99 36.7 10.0  D6717 63.0 37.6 33 63 4 12.9 52.8 99 36.7 10.0  D6718 62.0 34.7 29 67 4 12.9 53.8 89 33.7 10.0  D6719 62.0 34.7 29 67 4 12.9 55.8 99 34.0 10.0  D6719 62.0 34.7 29 67 4 12.9 55.8 99 34.0 10.0  D6719 63.0 34.1 23 73 4 12.9 53.3 84 12.0  D6710 62.5 35.1 13 81 6 11.9 53.3 88 10.0  D6711 62.5 35.1 13 81 6 11.9 53.8 85  D6806 63.0 34.1 23 73 4 12.6 53.0 90 34.7 10.0  D6710 62.5 35.1 13 81 6 11.9 53.3 88 10.0  D6711 62.5 35.1 13 81 6 11.9 53.8 88 10.0  D6712 63.0 34.1 23 73 4 12.6 53.0 90 34.7 10.0	Leeds	13768	63.5	33°7	15	82	<b>س</b>	13,4	52,6	94	34.7	10.0	4
Mescana         57,5         32,4         16         79         5         15.1         47.7         100         34.3         10.5           DET 327         62.0         29.1         7         86         7         12.8         52.6         93         33.7         10.0           DET 327         60.5         30.0         11         83         6         12.8         52.5         96         35.7         10.5           D6647         63.0         37.9         37.6         68         5         12.5         53.3         94         34.0         10.0           D6676         64.0         37.9         37.6         68         5         12.5         53.3         94         34.0         10.0           D6715         63.0         37.9         37.6         3         12.2         53.4         94         34.0         10.0           D6715         63.0         37.2         37.6         3         12.4         54.8         91         34.7         10.0           D6721         62.5         36.2         19         77         4         12.8         53.8         92         33.7         10.0           D6722         62	Weaccana         57.5         32.4         16         79         5         15.1         47.7         100         34.3         10.5           DT 327         Wells         62.0         29.1         7         86         7         12.8         52.6         93         33.7         10.0           DT 327         60.5         30.0         11         83         6         12.8         52.5         96         35.7         10.0           D6647         63.0         37.0         18         77         5         11.9         54.1         86         35.7         10.0           D6674         63.0         37.9         35         62         3         12.5         53.3         94         34.0         10.0           D6674         63.0         37.9         35         62         3         12.2         53.1         87         10.0           D6718         65.0         37.9         36         6         7         4         12.8         53.1         87         10.0           D6718         63.0         36.2         19         77         4         12.8         53.8         89         33.7         10.0           <	Mindum Rolette	5296	62.5 63.5	37 <b>.</b> 3	36 27	59 69	2.4	11.7 13.1	52.0 53.6	91	34.0	10.0	7 7
Wascana         57.5         32.4         16         79         5         15.1         47.7         100         34.3         10.5           Wells         Obd         32.4         16         79         5         11.8         52.6         93         33.7         10.0           D64.3         30.0         31.0         11         86         7         12.8         52.6         96         35.7         10.0           D6674         63.0         37.9         27         68         5         12.5         53.3         94         34.0         10.0           D6674         63.0         37.9         27         68         5         12.5         53.3         94         34.0         10.0           D6674         63.0         37.9         35         62         3         12.5         53.1         86         34.0         10.0           D6715         63.0         37.9         35         62         3         12.5         53.1         89         36.7         10.0           D6721         63.0         37.2         36         4         12.9         52.8         89         33.7         10.0           D6733	Weascana         57.5         32.4         16         79         5         15.1         47.7         100         34.3         10.5           Wealls         1333         62.0         29.1         7         12.8         52.6         93         33.7         10.0           D6647         63.0         37.0         18         77         5         11.2         52.6         93         33.7         10.0           D6674         63.0         37.0         18         77         5         11.2         52.6         93         33.7         10.0           D6674         63.0         37.9         27         68         5         12.5         53.1         86         3.7         10.0           D6715         63.0         37.9         35         62         3         12.2         53.1         87         3.7         10.0           D6718         63.0         37.2         37         60         3         12.2         53.1         89         33.7         10.0           D6718         63.0         37.6         3         4         12.8         53.8         89         33.7         10.0           D673         62.0													
Wells         13333         62.0         29.1         7         86         7         12.8         52.5         93         33.7         10.0           DET         327         60.5         30.0         11         83         6         12.8         52.5         96         35.7         10.5           D6674         63.0         37.0         11         83         6         12.5         53.5         96         35.7         10.0           D6676         64.0         37.9         27         68         5         12.5         53.6         94         34.0         10.0           D6715         63.0         37.9         38         59         3         12.2         53.6         93         33.7         10.0           D6718         63.0         37.2         37         60         3         12.4         54.8         91         34.7         10.0           D6718         63.0         38.8         29         67         4         12.8         53.8         89         33.7         10.0           D6721         63.0         34.7         29         67         4         12.9         55.8         92         34.0 <td< td=""><td>  National N</td><td>Wascana</td><td></td><td>57.5</td><td>32.4</td><td>16</td><td>79</td><td>Ŋ</td><td>15,1</td><td>47.7</td><td>100</td><td>34.3</td><td>10.5</td><td>4</td></td<>	National N	Wascana		57.5	32.4	16	79	Ŋ	15,1	47.7	100	34.3	10.5	4
DE 327  DE 327  DE 40.5  DE 327  DE 40.5  DE 40.	DE 327  DE 327  DE 327  DE 327  DE 42  DE 427  DE 42  DE 427	Wells	13333	62.0	29,1	7	98	7	12,8	52.6	93	33,7	10.0	4
D6647  D6674  D6674  D6674  D6674  D6674  D66774  D66775  D66775  D66776  D67775  D67775  D6777  D67775  D67775  D67775  D67776  D67777  D6777  D67777  D6777  D67777  D6777  D677  D6777	D6647  D6674  D6674  D6674  D6674  D6674  D6674  D66774  D66776  D66776  D66776  D6778  D778  D779  D779	DT 327		60.5	30.0	11	83	. 9	12.8	52.5	. 96	35.7	10.5	4
D6676  D6676  D6676  D66776  D67718  D67718  D67718  D67718  D67718  D67718  D67718  D67718  D67719  D67719  D67719  D6772  D6772  D6773  D6773  D6773  D68776  D68776  D68776  D68776  D68776  D68776  D68776  D68776  D68776  D77	D6674  D6674  D6676  G4.0  37.9  35  G2.3  12.5  53.3  94  34.0  10.0  D6714  D6718  D6718  D6718  D6718  D6719  D6721  D6722  D6722  D6723  D6733  D6733  D6876  G3.0  34.1  24.7  D6876  D6876  D6740  D6751  D6752  D6752  D6753  D6753  D6753  D6753  D6753  D6753  D6753  D6754  D6754  D6754  D6755  D6755  D6755  D6755  D6755  D6755  D6755  D6755  D6755  D6756  D6756  D6757  D6757  D6757  D6758  D6758  D6758  D6758  D6758  D6759  D7599  D759	D6647		63.0	37.0	18	77	5	11.9	54.1	86	•	1	က
D6676       64.0       37.9       35       62       3       12.5       53.6       93       33.7       10.0         D6714       63.0       37.9       38       59       3       12.2       53.1       87       -       -         D6718       63.0       37.2       37       60       3       12.4       54.8       91       34.7       10.0         D6718       63.0       38.8       29       67       4       12.8       53.8       89       33.7       10.0         D6721       62.5       36.2       19       77       4       12.9       52.8       92       33.7       10.0         D6722       62.0       34.7       29       67       4       12.9       52.8       92       35.7       10.0         D6733       62.0       36.0       35.7       25       71       4       12.9       55.8       92       36.0       10.0         D6838       63.0       35.1       13       81       6       11.9       53.3       85       -       -         D6876       62.5       35.1       13       4       12.6       53.0       90       34.7<	D6676  D6714  D6715  D6716  D6717  D6717  D6717  D6717  D6718  D6718  D6718  D6718  D6718  D6718  D6721  D6722  D6722  D6733  D6733  D6733  D6733  D6733  D6734  D6734  D6734  D6734  D6735  D6745  D6755  D6756  D6757  D6758  D6758  D6758  D6759  D6779  D6779  D6779  D6779  D6779  D6779  D6779  D6779  D6779  D6770  D6779  D6	D6674		63.0	37.9	27	89	2	12.5	53,3	94	34.0	10.0	4
D6714  D6715  D6716  D6716  D6716  D6717  D6717  D6717  D6718  D6718  D6718  D6718  D6718  D6718  D6719  D6710  D6	D6714  D6714  D6715  D6715  D6716  D6716  D6717  D6717  D6717  D6718  D6717  D6718  D6717  D6718  D6718  D6718  D6718  D6718  D6719  D6710  D77  P7  P7  P7  P7  P7  P7  P7  P7  P	אלאאת		0 /9	37 0	25	63	c	12 5	53	03	13 7	10.0	7
D6715 D6718 D6718 D6718 D6718 D6718 D6721 D6722 D6722 D6723 D6723 D6723 D6723 D6723 D6723 D6723 D6724 D6733 D6724 D6725 D6725 D6725 D6726 D6726 D6726 D6727 D6727 D6727 D6727 D6728 D6728 D6729 D6729 D6729 D6729 D6729 D6730 D6730 D6730 D6730 D6730 D6730 D6731 D6730 D6731 D6731 D6731 D6732 D6733 D6734 D6734 D6734 D6734 D6735 D6735 D6736 D6736 D6736 D6737 D6737 D6738 D6738 D6738 D6738 D6738 D6739 D6730	D6718  D6718  D6718  D6718  D6718  D6719  D6719  D6719  D6721  D6722  D6722  D6733  D6733  D6733  D6733  D6733  D6733  D6733  D6734  D6733  D6734  D6735  D6735  D6735  D6735  D6736  D6737  D6737  D6738  D6738  D6739  D6739  D6739  D6739  D6739  D6739  D6739  D6739  D6730  D6740  D6730  D6	76214		63.0	37.0	) «	0.5	) (	12.2	53.1	87	) !	• 1	۳ (
D6722 D6723 D6723 D6723 D6724 D6725 D6725 D6725 D6725 D6725 D6725 D6726 D6726 D6726 D6727 D6727 D6727 D6727 D6727 D6727 D6727 D6727 D6727 D6728 D6729 D77 D77 D77 D77 D77 D77 D77 D77 D77 D7	D6722 D6722 D6723 D6723 D6723 D6723 D6723 D6723 D6723 D6723 D6733 D6733 D6734 D6734 D6734 D6735 D6735 D6735 D6735 D6736 D6736 D6737 D6737 D6737 D6738 D6738 D6738 D6739 D6739 D6739 D6739 D674 D774 D774 D774 D774 D774 D774 D774	D6715		63.5	27.0	27	60	) (	12 7	, , , , , , , , , , , , , , , , , , ,	0.0	3/, 7	10 0	, <
87 33 33 83 83 83 83 83 83 83 83 83 83 83	87 32 22 23	15718 16718		63.0	2 00	000	22	7 4	13.0	54.7	4 0	36.7		t 4
87 32 2 2 3 3 4 3 3 5 3 5 5 5 5 5 5 5 5 5 5 5 5 5	87 83 83 83 83 83 83 83 83 83 83 83 83 83	D6721		60.00	36.2	10	7.	t <	12.0	יי מ	0 00	33 7		t <
87 83 83 83 83 83 83 83 83 83 83 83 83 83	87 83 83	17/07		05.0	3000	13	:	t	12.0	0.00	60	7.00	10.0	†
72 73 76 83 83 87	83 83 83	D6722		63.0	37.6	33	63	7	12,9	52.8	92	33.7	10.5	4
87 83	87 83	D6723		62.0	34.7	29	67	4	12.9	53,3	. 46	35.7	10.0	7
83	83	D6733	,	63.0	35.7	25	71	7	12.9	55.8	92	36.0	10.0	7
87 83	84 83	n6761		63.5	300	37	20	7	12.3	54.6	06	34.0	10.01	7
87	84 5	10/07		200	0 10	5 6	5 6	t 4	1100	, c	2 9	÷	0.01	tc
87	87	70030		6.20	33.1	57	σī	۵	11.9	53.5	60	•	•	7
				63.0	34.1	23	73	4	12.6	53.0	06	34.7	10.0	4
			Basis											
			lor score not	acceptabl	e. norma	11v: h	wever.	due	to the	excellent	t color this c	rop vear	the mi	of mum

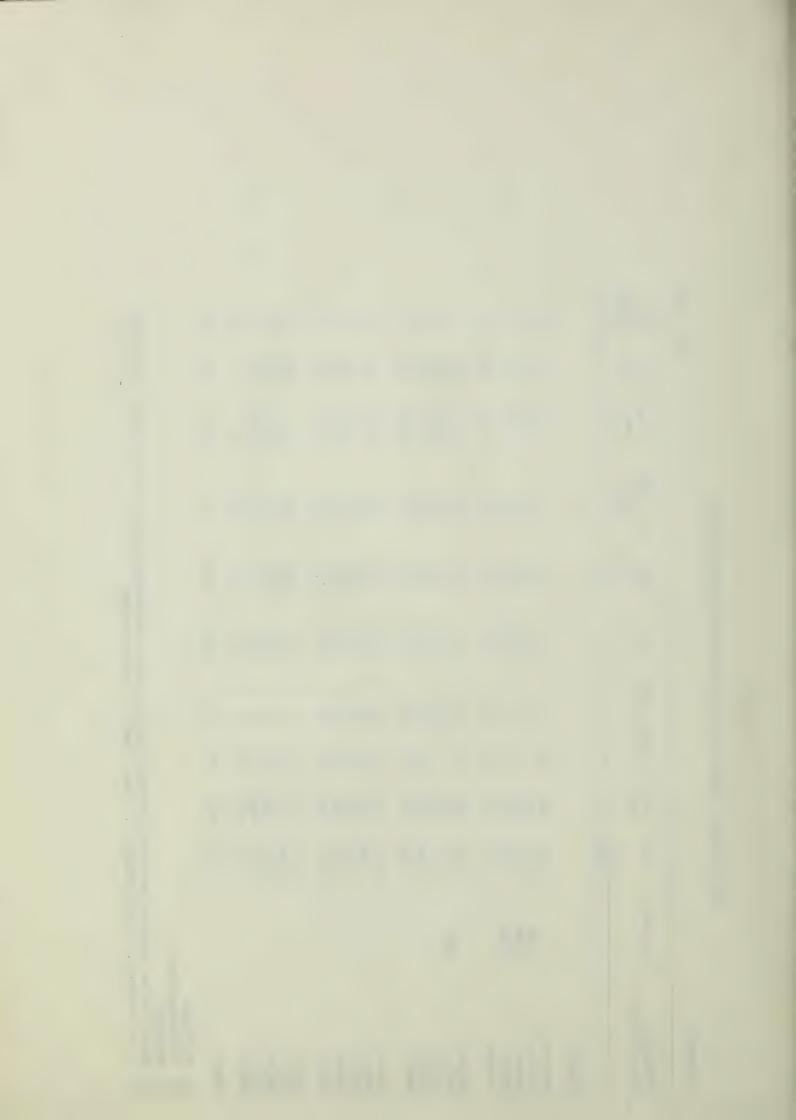


TABLE 25

QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

Variety or	C.I. No.	T.W.	1000	Kerne1		Size	Wht.	Pur.	Dust Color	Semo.	Vis.	Gen.
State Sel. No.		1/	Kwt.	Lg.	Med. Sm	Sm.	Pro. <u>2</u> /	Semo.	Score	Abs.	Color	Eval. 5/
		#/Bu.	00	%	<b>%</b>	%	%	%		%		
St. Paul												
Hercules		59.0	38.6	33	64	n	14.2	50.5	87	1	f	3
Lakota	13335	59.0	30.8	6	86	5	13.7	0.64	90	34.0	10.0	4
Leeds	13768	0.19	34.8	24	73	8	15.4	49.7	. 06	32.3	10.0	4
Mindum	5296	0.09	38.5	36	09	4	13.0	51.0	80	ı	ı	7
Rolette		61.5	36.4	33	9	m	14.3	52.1	85	33.0	10.0	m
Wascana		58.0	37.7	38	59	m	15.0	48.0	90-G	34.7	10.0	4
Wells	13333	61.0	30.3	12	82	9	14.2	48.7	85		i	က
DT 327		0.09	36.0	36	61	3	14.0	50.3	95	37.0	10.0	4
D6647		0.09	33.0	12	82	9	13.7	51.5	83	ı	í	7
D6674		59.5	36.6	31	99	Ŋ	14.2	48.7	90	34.7	9.5	4
D6676		0.09	36.6	29	99	7	14.8	50.0	91	35,3	9.5	4
D6714		60.5	37.5	32	9	4	13.7	51.3	87	ł	1	m
D6715		0.09	37.2	29	99	רע	14.1	49.5	90	34.7	10.0	4
D6718		61.0	36.5	31	99	e	14.8	49.7	90	35.0	10.0	4
D6721		0.09	38.3	35	29	9	14.3	50.8	9-06	35.3	9.5	4
D6722		60.5	38.0	35	62	m	14.1	50.3	92	33.7	10.0	4
D6723		0.09	36.0	40	57	m	14.2	50.3	06	33.7	9.5	4
D6733		60.5	36.0	30	67	e	15.1	50.3	88	35.3	9.0	4
D6761		60.5	38.6	37	58	2	13.7	52.8	89	34.0	9.5	4
D6838		61.0	32.1	10	83	7	13.6	49.5	82	1	1	7
D6876		62.0	33.4	25	72	ന	14.1	50.8	06	35.3	9.0	4
/ Unofficial												
2/ 14% Moisture Basis	Basis											



TABLE 26

## QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

NORTH DAKOTA

		1/	Kwt.	Lg.	Lg. Med. Sm.	1. Pro.	Semo. $\frac{3}{4}$	Score 4/	Abs. $\frac{2}{2}$	Color	Eval 5/
		#/Bu.	ņ	%	%	64	%		%		
Fargo											
Hercules		6.09	41.6	20	7 97	12.8	53.9	88	33.3	9.5	4
reeds	13335	62.3	36.1	20			51.7	93	32.5	10.0	4
Mindum	5296	60.5	34.8	17	74 9		51.5	. 82	33.2	0.0	ന
Kolette Wascana		58.6	40.3	747	50 4	13.9	48.5	98 88	34.1	9.0	v 4
Wells .	13333	58.6	29.0	14	76 10	13.1	50.1	87	32.3	9.5	4
DT 327		60.5	37.0	43			50.5	95	34.0	0.6	ന
D6647		0.09	34.8	17	7 97		4.64	. 83	32.9	8.0	2
D6674		8.09	38.4	33		12.9	50.3	93	32.8	10.0	7
D6676		61.6	37.3	30	65 5	,	51.4	95	32.7	10.0	4
D6714		61.4	37.4	40	54 6	12.3	50.7	92	32.3	9.5	4
D6715		61.3	38.9	38	57 5		50.8	89	33.2	0.6	m
D6718		61.0	37.1	25	70 5		50.5	89	33.4	0.6	က
D6721		60.3	37.3	30			51.6	85	32.3	9.5	ന
D6722		60.3	36.9	32			50.9	97	32.8	10.0	4
D6723		61.6	37.6	46	50 4	12.8	51.4	80	32.1	9.5	4
D6733		61.3	36.2	29			51.5	98	32.6	0.6	က
D6761		60.1	40.2	43	53 4	12.7	51.0	90	33.2	0.6	ന
D6821		8.09	37.4	24			50.7	82	31.6	8.5	7
D6838		59.9	36.5	21			51.4	80	32.7	8.0	7
D6876		59.5	33.0	16	77 77	13.0	51.4	88	32.0	0.6	ς.
D6878		60.3	38.4	77	52 4		50.8	85-R	35.0	8.5	H
1/ Unofficial 2/ 14% Moisture Basis	Basis										

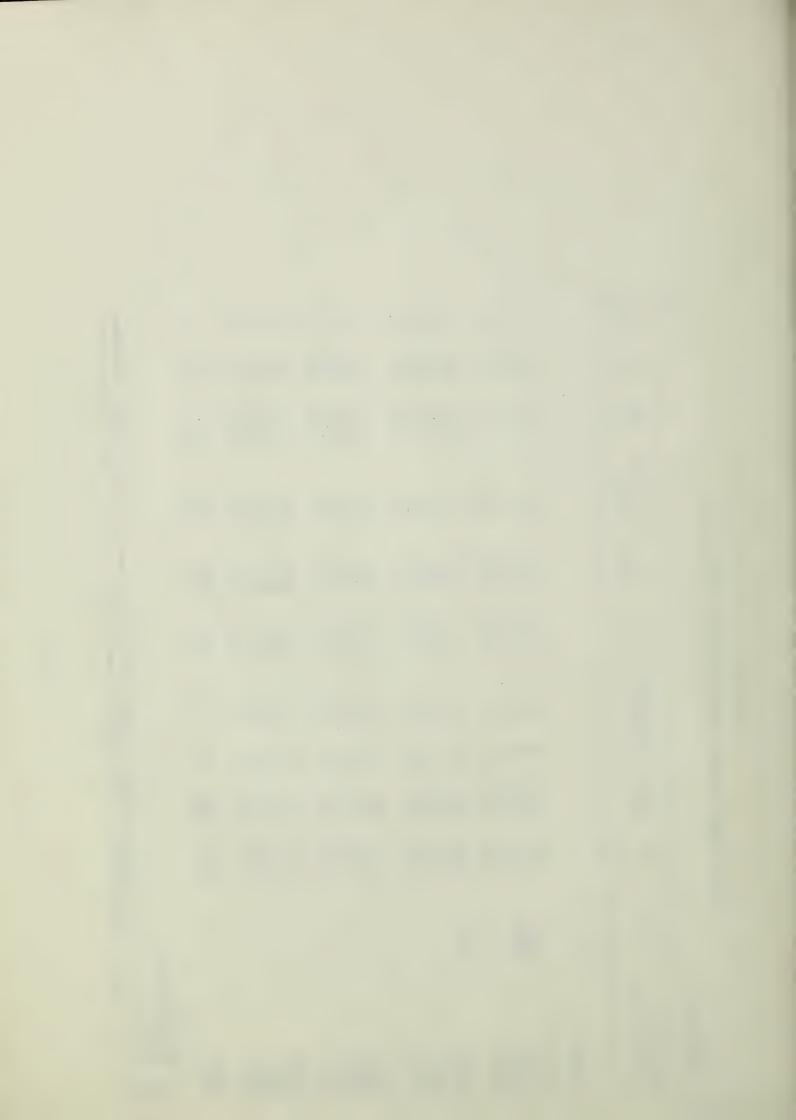


TABLE 27

## QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

NORTH DAKOTA

Variety or State Sel. No.		T.W.	1000 Kwt.	Lg. M	Med. Sm.	e su	Wht. Pro.	Semo. $\frac{3}{4}$	Score 4/	Abs. $\frac{2}{}$	Vis. Color	Gen. Eval.
		#/Bu.	÷80	%	%	%	%	%		%		
Langdon												
Hercules		62.8	47.4	69	29	2	10.9	50.6	. 88	33.2	0.6	3
Leeds	13768	62.1	42.1	94	51	ന	11.8	49.2	96	31.8	10.0	4
Mindum	5296	8.09	41.1	27	69	7	11.9	49.2	82	32.4	0.6	2
Rolette		62.8	47.0	09	80 0	7.5	12.0	50.7	90	31.9	2.6	4
wascana		0.10	1.04	8	2	7	11.3	4.v	c,	34.0	۷.	4
Wells	13333	61.4	35.8	28	29	ĸ	10.6	48.3	83	31.9	0.6	3
DT 327		62.0	43.1	61	37	7	11.5	50.7	89	33.2	0.6	က
D6647		61.3	42.1	42	55	က	11.6	6.94	82	31.4	8.5	2
D6674		61.2	45.5	65	33	7	13.0	49.4	89	31.8	9.5	4
D6676		62.1	43.3	54	44	7	12.4	48.7	85	32.0	0.6	m
D6714		61.8	43.2	51	46	m	11.9	46.0	06	32.1	0.6	4
D6715		62.1	42.2	64	48	က	11.6	48.6	93	32.1	9.5	4
D6718		61.5	43.3	64	64	2	12.1	48.0	85	32.9	0.6	c
D6721		61.9	46.0	62	36	7	11.2	49.0	88	32.1	0.6	n
D6722		8.09	43.2	20	47	3	12.5	48.1	93	31.9	9.5	4
D6723		62.4	9.44	62	36	2	11.8	49.3	50	32.7	0.6	m
D6733		62.5	40.5	746	52	2	12.6	48.3	85	32.2	8.5	7
D6761		61.5	45.6	59	39	2	11.7	48.4	68	31.6	9,5	7
D6821		62.4	45.6	57	41	2	11.1	50.0	80	32.6	8 2	2
D6838		60.5	41.4	33	64	က	12.0	9.67	80	32.5	8.0	_
D6876		62.1	41.2	46	52	2	11.8	49.1	20	31.9	0.6	
D6878		62.3	8.44	63	36	-	11.9	48.5	88	33.1	0.6	9 (*)
1/ Unofficial 2/ 14% Moistu 3/ Purified	Unofficial 14% Moisture Basis Purified											



QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

	C.I. No.	T.W.	1000 Kwt.	Kernel Lg. Me	el Size Med. Sm.	Sm.	Wht. Pro. $\frac{2}{2}$	Pur. Semo.	Dust Color Score	Semo. Abs.	Vis. Color	Gen. Eval.
		#/Bu.	60	%	%	%	%	%		84		
Eureka												
Hercules		60.5	. 37,3	36	19	3	13.8	53.4	92	36.0	9.5	n
Leeds 13768		61.5	34.2	16	80	. 4	14.6	52.1	96	34.3	10.0	4
Mindum 5296		60.5	35,3	17	79	4	13.9	52.4	87	1	1	7
Rolette		61.5	36.4	27	69	4	14.3	53.9	93	35.7	10.0	7
Wascana		57.0	31.5	14	82	4	15.3	51.1	102	37.0	10.0	4
Wells 13333	<u>.</u>	59.0	29.7	4	88	∞	14.2	51.5	98	36.0	9.5	4
DT 327		59.5	27.5	15		4	13.9	51.8	66	37.0	10.0	4
D6647		57.5	30.9	က		15	13.8	48.9	9-96	37.3	9.5	m
D6674		60.5	39.7	22	74	4	14.1	53.4	86	36.3	9.5	7
D6676		61.0	36.4	17	80	m	14.1	53.7	86	36.3	9.5	4
D6714		61.5	36.8	24	73	m	14.1	53.7	94	35.7	10.0	4
D6715			37.0	21	9/	e	13.8	53.7	95	36.0	10.0	4
D6718		60.5	34.2	10	85		14.0	53.2	97	36.7	9.5	4
D6721			36.0	19	87	. 7	14.0	53.2	93	35.0	9.5	4
D6722			39.2	24	73	ci.	14.0	52.9	86	34.0	10.0	4
D6723		61.5	37.5	29	99	5	13.7	54.2	97	33.7	10.0	4
D6733		61.0	31.9	1	84		14.3	53.2	97	36.0	10.0	7
D6761		61.5	37.9	32	62	3	13.4	55.3	95	36.7	9.5	7
D6838		61.0	34.6	œ	87	'n	13.2	53.2	90	37.3	0.6	ന
D6876		0.09	33.1	=======================================	83	9	14.0	52.1	100	37.3	10.0	4
1/ Unofficial 2/ 14% Moisture Basis												

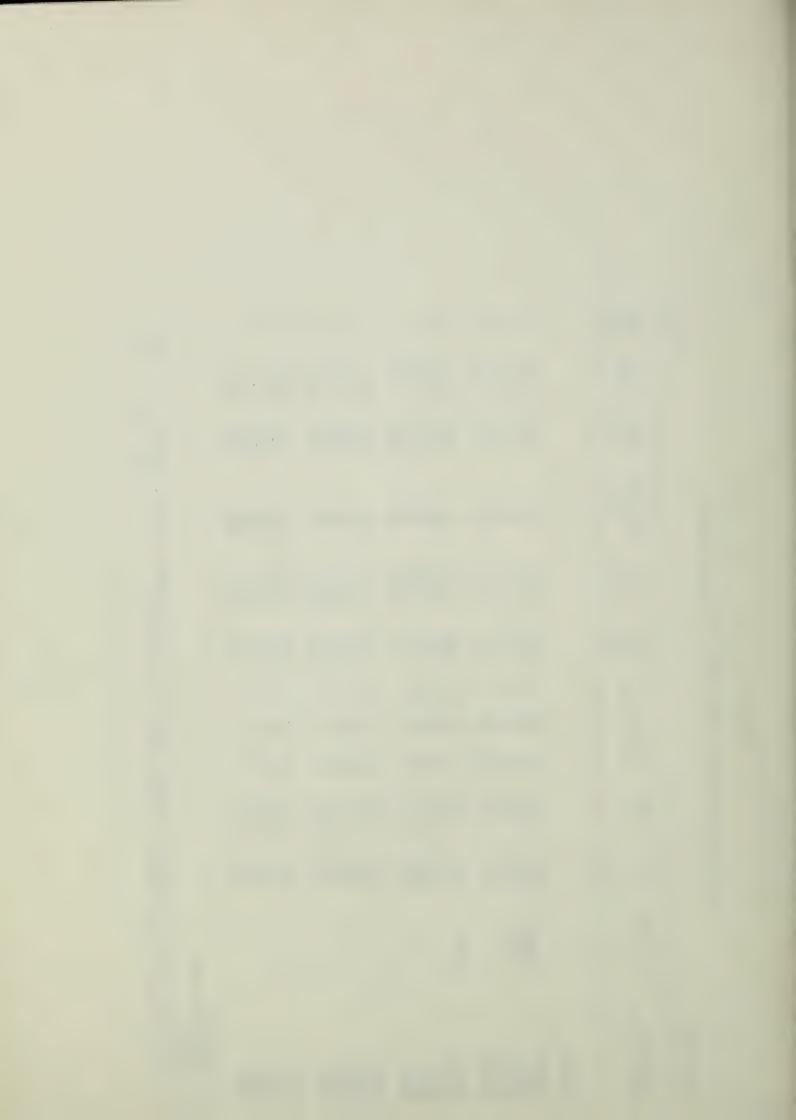


TABLE 29

# QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

SOUTH DAKOTA

#/Bu. 13768 63.0 5296 61.5 62.5 60.0 13333 61.0 61.5 62.5 62.5		533 % 64 74 22 33 %	13.9	%		The same of the sa		
13768 62.0 5296 61.5 62.5 60.0 13333 61.0 61.5 62.5			13.9			%		
63.0 61.5 61.5 61.0 62.5 62.5 7			13.9					
62.0 61.5 60.0 61.0 61.5 62.5			14.7	55.1	91	35,3	9.5	4
5296 61.5 62.5 60.0 1333 61.0 61.0 61.5 62.5				53.2	94	33.7	10.0	4
62.5 60.0 61.0 61.5 62.5 62.5			14.2	54.0		1 (	1 6	7
61.0 61.0 61.5 62.5 62.5			14.5	54.3	88 86 86	35.7	10.0	m 4
		87 6	14.4	52.4	95	33.3	9.5	4
		78 3	14.6	53.7	97	36.0	10.0	4
		89 4	14.0	54.2	93	36.0	9.5	4
			14.5	53.7	93	34.7	9.0	ന
			14.6	53.7	96	34.3	10.0	4
	35.8 23		14.1	53.2	94	33.7	10.0	4
			14.2	53.7	94	34.3	10.0	4
62.5 35.0	.0 13	84 3	14.4	52.4	95	33.7	10.0	4
			13.9	54.7	06	34.3	9.5	က
			14.5	53.7	86	34.0	9.5	4
		77 4	15.2	53.4	76	33.7	9.5	4
			14.7	54.5	97	34.3	10.0	4
	.7 28	70 2	14.7	53.7	92	34.7	10.0	7
			14.3	53.4	98	1	, 1	7
٠.			14.6	52.4	97	33.0	10.0	4
Unofficial 14% Moisture Basis								

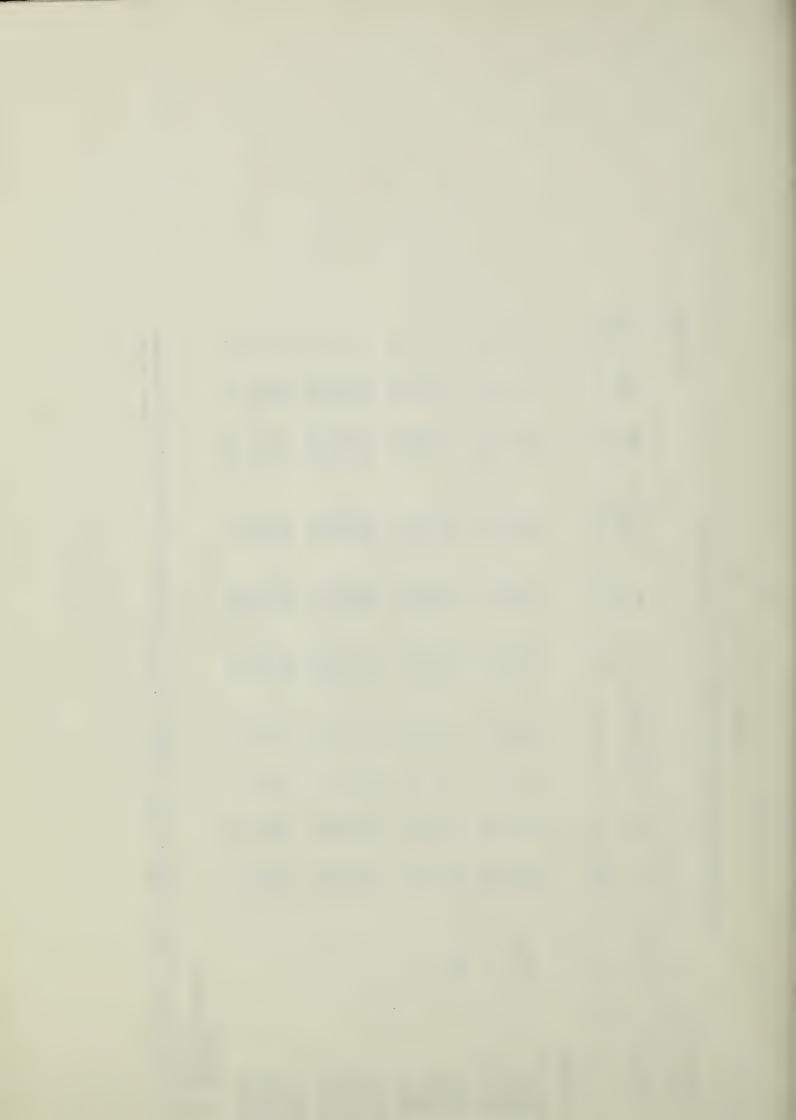


TABLE 30

QUALITY DATA ON UNIFORM REGIONAL DURUM WHEAT NURSERY SAMPLES

WASHINGTON

Variety or State Sel. No.	C.I. No.	T.W.	1000 Kwt.	Kerne Lg.	Kernel Size Lg. Med. Sm.	Sm.	Wht.	Pur.	Dust Color Score	Semo.	Vis. Color	Gen. Eval.
		1/		)			77	3/	14	77		2/
		#/Bu.	60	%	%	%	%	%		%		
Pullman												
Hercules		63.0	50.8	73	25	2	14.1	53.6	80	34.3	10.0	7
Leeds	13768	64.0	45.7	67	31	2	13.1	50.8	92	34.3	9.5	4
Mindum	5296	64.0	50.2	70	27	8	11.2	53.1	83	1	1	2
Rolette		63.0	51.3	17	22	7	14.9	50.5	86	ł	1	က
Wells	13333	0.49	45.9	57	04	e	12.2	49.2	98	ı	1	3
D6586		64.0	50.5	69	30	Н	13.9	52.3	87	1	1	en
D6647		0.49	51.0	83	16	-	12.0	54.2	84	1	1	2
D6676		65.0	45.7	89	30	2	13.4	52.8	06	33.7	10.0	4
D6714		64.0	50.2	73	56	7	14.2	51.8	85	ı	1	m
D6715		0.49	48.8	72	27	-	13.0	53.9	89	33.7	10.0	4
n6718		0 79	2 97	60	20	·	12 6	5 2 2	Co	33 3	0 01	4
D6721		63.5	8 8 7	76	23	۰ -	14.0	52.8	87	2 1		٠,٠
D6722		64.0	45.5	72	27		13.2	52.6	92	33.0	10.0	0 4
D6723		63.5	45.2	71	28	-	13.4	52.1	06	33.0	10.0	4
D6733		65.0	47.4	69	30	-	13.2	52.8	86	1	1	3
D6771		63.0	42.9	63	34	m	12.3	52.8	85	i	1	2
D6780		63.0	24.0	. 52	44	-	12.4	51.0	98	1	1	3
1/ Unofficial												
	pasis											
	Below 80 color score not acceptable, normally; however, due to the excellent color this crop year, the minimum	acceptable	e, norma	11y; he	wever	, due	to the	excellent	color this c	rop year	, the mir	imum
	1 - No Promise, 2 - Little Promise, 3 - Some Promise, 4	e Promise	, 3 - Soi	ne Pron	nise,	4 - 6	- Good Promise.	ise.			score is 88.	. 88

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	10 10 10 10		

Cornell over on memory trabetery proper paint, among and



